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REPORT OF HEALTH COMMITTEE

FOR THE

YEAR ENDED 31st DECEMBER, 1943

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CITY OF MELBOURNE

REPORT OF THE HEALTH COMMITTEE FOR THE YEAR 1943.

MEMBERS OF COMMITTEE

Councillor Townsend (Chairman)
Councillor Boulton (elected 20/9/'43)
Councillor Brens
Councillor Carter (retired 25/8/'43)
Councillor Coleman
Councillor Coles (retired (25/8/'43)
Councillor Holland (elected 20/9/'43)
Councillor E. L. Morton

The Health Committee submits, for the information of the Council, a report regarding the work carried out under the directions of the Committee during the year ended 31st December, 1943.

REPORTS OF OFFICERS

A report by the Medical Officer of Health (Dr. John Dale) upon the work of the Health Department during 1943, and upon the health of the inhabitants of the City generally, is attached hereto, together with reports by Dr. Hilda E. Kincaid upon child welfare work, by Dr. Hilda Bull upon infectious diseases, by Mr. J. W. Byrne and Miss Beatrice Woodcock upon the work of the dental clinics, by Mr. T. G. O. Jordan, the Chief Health Inspector, on the routine work of the Department, by Messrs. Dunn, Son and Stone, City Analysts, and by Professor Harold A. Woodruff, Director of Bacteriological Laboratory, University of Melbourne. Full details of the various health activities of the Council are contained in these reports.

CHILD WELFARE

The health of the children has been good, and in her report, Dr. Kincaid gives a very encouraging comparison of the examination of the health records of over 1000 pre-school children, with that of a similar number of records of the year 1936.

The Committee is pleased to report that the accommodation at the Pigdon Street Nursery School, adjoining the State School at North Carlton, has been doubled by building a new health centre and adding the accommodation at the old centre to that of the Council's Kindergarten. The cost of this work was £1236/14/10.

Authority has also been given by the Council for the construction of a new large kindergarten and creche at the corner of Racecourse Road and Victoria Street, Flemington, at the estimated cost of £8648, including certain equipment. This building, which will be the second kindergarten erected by the Council in the City of Melbourne, will fill a long-felt need in the Flemington district.

The Committee expresses regret that the Council's dental officers, Mr. J. W. Byrne, B.D.Sc., L.D.S., and Miss Beatrice Woodcock, B.D.Sc., L.D.S., have resigned, and that, owing to the great demand on dental services made by the Forces, it has been impossible to obtain successors up to the present time.

The Committee deires to place on record its appreciation of the valuable services rendered by Mr. Byrne and Miss Woodcock as part-time dental officers for the Council.

The grants made by the Council to kindergartens and creches for the year 1943-1944 were £1000 and £500 respectively.

The Committee continued its assistance to parents in indigent circumstances by the supply of milk and vitamin concentrates, such as cod liver oil, etc., the total expenditure being £1640/11/8, of which the amount of £581/3/9 was refunded by parents. The number of families needing assistance in the supply of milk and foodstuffs shows a further substantial reduction owing to the improved economic conditions.

The total amount expended by the Council on the maintenance work of the child welfare centres in the City of Melbourne during 1943 was £4264/18/6, of which £991/4/6 was contributed by the State Government. It is satisfactory to record that during the year the State Government increased its subsidy from £337/10/- to £787/10/- per annum, being at the rate of £112/10/- per nurse. Since 1927 the Council has spent over £74,520 on the construction, equipment and maintenance of child welfare centres, kindergartens and creches.

INFECTIOUS DISEASES HOSPITAL—FAIRFIELD

The Council's contribution towards the Queen's Memorial Infectious Diseases Hospital amounted to £12,001/4/-.

The contributions for the past five years were:—

1939	£10,344	12	8
1940	11,588	14	6
1941	11,105	7	4
1942	11,501	7	0
1943	12,001	4	0

HEATHERTON SANATORIUM

The Council's contribution towards the Heatherton Sanatorium was £1446/4/8.
The contributions for the past five years were:—

1939	£1,288	11	8
1940	1,266	9	8
1941	1,260	1	6
1942	1,362	1	10
1943	1,446	4	8

FOOD SUPPLIES

Reports upon the examination of milk indicate that the chemical quality of milk samples is again very good, and that the results of the bacteriological examinations of milk samples were slightly better than those of the previous year, though still inferior to those obtained in 1940.

In his report the Medical Officer of Health states that the problem of the cleanliness and safety of the milk was a matter of great concern during the year, owing to the outreak of typhoid fever in the Cheltenham district, which proved to be a classic example of a milk-borne outbreak responsible for over 400 cases and 22 deaths. As a result of this, a Milk Pasteurization Act, passed by the State Government, provides for the eventual pasteurization of all milk in the Metropolitan and other areas of the State, and a Committee has been appointed under the Act to draw up a scheme for the pasteurization of the milk supplies of the Metropolitan area. Conditions of war, however, will no doubt delay effective pasteurization of the whole of the milk supply.

The Committee draws attention to the need for the imposition of a legal standard for bacterial count, and regrets that the proposals for such legal standard which were discussed last year did not reach fruition.

HOUSING

The programme of elimination of slum or sub-standard houses and of the construction of new houses which was begun in the Metropolitan area in 1940 under the Housing Commission of Victoria, for which the Health Department acts as agents in the City area, has again been retarded on account of the war and shortage of labour and scarcity of materials.

The accompanying report of the Chief Health Inspector contains a complete summary of the work done under the new legislation since May 1940, and shows that 196 houses in the City of Melbourne have been pulled down under the direction of the Housing Commission.

The Medical Officer of Health again directs attention in his report to the housing shortage and overcrowding in houses, and stresses the need for replanning large areas, covering hundreds of acres, of the City, particularly in North Melbourne and Carlton, in preparation for demolition and the undertaking of the huge task of rehousing the people in new houses that will be properly orientated, lighted, ventilated and equipped.

He urges that all the authorities concerned should join in the task of large scale reclamation and detailed planning under the co-ordination of a town planning authority and emphasises the fact that the time to begin is unquestionably now; otherwise, when the war does end, there will either be unnecessary delay or the work will be undertaken without proper consideration.

APPRECIATION OF SERVICES OF EX-COUNCILLOR H. E. CARTER

The Committee desires to place on record its high appreciation of the invaluable services of ex-Councillor H. E. Carter, who retired from the Committee on 25th August, 1943, consequent upon his retirement from the Council, during his membership of the Committee for fourteen years. At all times ex-Councillor Carter displayed a very keen interest in all matters pertaining to the health of the people and worked zealously in promoting child welfare, especially regarding the erection of the Council's kindergarten and creche at Flemington.

RETIREMENT OF COUNCILLOR A. W. COLES

The Committee also desires to record its high appreciation of the splendid services rendered by Councillor A. W. Coles, who retired from the Committee on the 25th August, 1943. During his five years' service as a member of the Committee, Councillor Coles devoted himself wholeheartedly to every phase of the Committee's health activities. During his term of office as Lord Mayor, he officially opened the Council's new kindergarten, known as the Lady Huntingfield Free Kindergarten at North Melbourne, the first municipally built kindergarten in the State of Victoria.

W. C. L. TOWNSEND, LL.M., Chairman.

H. S. WOOTTON, Town Clerk.

1st June, 1944.

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REPORT OF THE MEDICAL OFFICER OF HEALTH.

Health Department,
Town Hall Chambers, MELBOURNE,
13th May, 1944.

The Chairman and Members, Health Committee:

Gentlemen,

I have the honour to present my report for the year 1943.

As has been so fortunately the case during recent years the health of the people has been well maintained and there has been no striking incidence of serious epidemic or other disease. It is likely indeed that the well-being of the people generally has improved continuously over the war years, because incomes generally have been higher and more assured, there has been no serious shortage of food or other essential goods, and the ample employment offering has enabled almost everyone to do, and to feel that he is doing, a useful job. The war has, in short, relieved want among large sections of the people, has banished the boredom and frustration of many lives and has introduced a wider measure of co-operative citizenship.

VITAL STATISTICS

The principal vital statistics for the last ten years and the averages for the five-year period 1929-1933, as supplied by the Government Statist, are given in the following Table 1, though not too much reliance can be placed upon the actual rates because of the obvious difficulty of estimating the numbers of the population owing to the great movements that have taken place.

TABLE 1

Year	Estimated Mean Population	No. of Births	Birth Rate	No. of Deaths	Death Rate	Infantile Mortality Rate per 1000 live births
1929 43	95,196	1525	13.1	1070	11.3	58.6
1934	92,500	1120	12.4	1139	12.7	50.0
1935	92,710	1119	12.4	1111	12.3	49.2
1936	92,850	1131	12.5	1147	12.7	53.9
1937	92,850	1176	13.0	1104	12.2	41.7
1938	92,900	1156	12.8	1135	12.6	39.8
1939	93,200	1105	12.2	1208	13.4	36.2
1940	93,650	1257	13.7	1210	13.3	54.1
1941	95,400	1303	14.2	1186	12.9	36.8
1942	95,500	1499	16.1	1283	13.0	44.0
1943	99,393	1804	18.1	1226	12.3	43.8

The most striking feature of the figures is the great rise in the number of births, from 1499 in 1942 to 1804 in 1943. This is part of a general increase in the number of births which, according to the Statist, was the highest number ever recorded in the State. The large number of births is due, of course, to the large number of marriages celebrated during the years 1940, 1941 and 1942. In 1942, the number of marriages, 23,636, was the record for Victoria, but in 1943, there was a decrease of over 5000 to 18,356.

In view of this decrease, it may confidently be expected that the birth-rate will fall again, but the recent rise has been quite remarkable, reaching in Melbourne a peak 50 per cent. higher than that prevailing during the years 1934-1939. Such fluctuations in the birth-rate are rather embarrassing to authorities who are making provision for child welfare and education, since it is difficult to estimate the accommodation required in kindergartens and schools if the "rate of flow" of children into these institutions varies over short periods. As already suggested, it seems unlikely that the war-time rise of the birth-rate will be more than a temporary phenonemon.

The general death-rate in Melbourne, 12.3 per thousand, was slightly less than that of last year, 13.0.

The infantile mortality rate, 43.8, is also slightly less than that of last year and is well below the average of ten years ago, which was 51.7 per thousand live births. It is, however, considerably above the record low figure for Melbourne City which was 36.2 in 1939. Considerable fluctuations, due to chance, are to be expected in the rates of small communities such as those which constitute Greater Melbourne, and it is more profitable to consider the trend of the figures over Greater Melbourne, the rate for which this year is 34.1, which is well below the average annual rate for the previous five years 1938-1942. This rate for Greater Melbourne is very satisfactory, but seems rather less so when one considers figures recorded in other parts of the world. In New York, for example, the infantile mortality rate for 1942 was as low as 28.8, a very remarkable achievement. Ten or fifteen years ago, it could be maintained that New Zealand and some of the Australian States were leading the world in infant welfare, but it seems that the world has learnt very quickly and that Australasia must look to its laurels in this respect.

It is interesting to speculate as to what low level it may be possible to reduce infantile mortality. As is well known, the greater proportion of the deaths now recorded occur within the first four weeks of life and a large proportion of these occur in the first week. This is called the neonatal mortality and may be regarded as the deaths of infants who are born without the strength to live, including those who are born prematurely, those with serious congenital defects and deformities, and those who are damaged or injured during birth. The other fraction of infantile mortality, namely, deaths occuring between four weeks and twelve months of age, is the one in which most of the dramatic improvement of recent decades has occurred. Deaths between four weeks and twelve months were caused mainly by infections, intestinal and respiratory, acting upon children whose resistance was low because of improper feeding and nurture. It is this fraction of the deaths which has been so successfully prevented by the child welfare movement and it is now only a small fraction of what it was 20 or 30 years ago, so that now a baby who is born with the strength to live and survives the perils of birth should not be exposed to any grave risk.

The neonatal mortality, on the other hand, has up to the present been only slightly reduced by perhaps ten or fifteen per cent., and it now constitutes over two-thirds of the total infant mortality. In Greater Melbourne, for example, last year, the neonatal mortality was 24.2 and the mortality between one month and twelve months was 9.8. Some cities in the world, however, have succeeded in reducing the neonatal mortality to as low a figure as 17 per thousand births. It was down to 21 in New York in 1942. It is, in short, quite reasonable to hope that infantile mortality may fall still further down to a total of 20, made up of 16 neonatal deaths and 4 between one and twelve months.

Details given in Dr. Kincaid's report show that of the 53 neonatal deaths notified in Melbourne last year, no fewer than 30 were due to prematurity and, as she points out, the preservation of the lives of premature babies calls for great skill on the part of the doctors and nurses concerned, which it is very hard to provide at the present time when the birth-rate is suddenly increased and there is, at the same time, a great shortage of hospital, medical and nursing services.

A detailed study of the table published by the Government Statist, showing infantile mortality in the different municipalities in the metropolitan area, shows a remarkable levelling of the individual figures. The difference formerly existing between the rates in the poorest municipalities and those that are relatively well-to-do, is now far less striking than it was even a few years ago. Last year, for example, with an average mortality of 34.1, the highest figure among the larger municipalities is 46.3 and the lowest is just over 20. The difference between outer and inner municipalities still exists, but it is not as great.

CHILD WELFARE.

As Dr. Kincaid reports, the health of the children has been good and she gives a very encouraging comparison of the examination of the health records of over 1,000 pre-school children, with that of a similar number of records of the year 1936. She finds, for example, that in the total group, whose ages range from two to six years, the proportion without any defects has increased from 19 to 36 per cent., and there is a marked improvement in the average height and weight for age, and in the condition of the teeth. Only slight improvement was noted in the prevalence of nose and throat defects, the proportion with defects untreated or already operated upon being 19 per cent, compared with 23 per cent. 8 years ago.

There has been, throughout the year, a very general and encouraging interest in the health of children, especially those of pre-school age. Local authorities, Government bodies and organizations of the general public have shown an active and increasing interest in the matter. It is particularly gratifying that the City Council has been able to double the accommodation at the Pigdon Street Nursery School by building a new health centre and adding the accommodation of the old centre to that of the kindergarten, and that authority was given for the construction of a new large kindergarten in Flemington, which is already well under way.

In addition to an increase in the annual grant towards maintenance to all the kindergartens and creches in the City, the Council is also giving substantial assistance to those controlling committees which are taking active steps to improve the facilities they provide for the pre-school child. The State Government has also, during the year, increased the grant it made towards the nurses engaged in child welfare and has strengthened the division of child welfare of the State Health Department by the addition of personnel, trained in pre-school work, to the staff of Dr. Scantlebury Brown.

Another encouraging feature of child welfare work has been the steady development of the work carried out under the auspices of the National Fitness Council of Victoria. This Council is one of those established by each of the State Governments at the instigation of the Commonwealth some five years ago for the general purpose of encouraging and co-ordinating health work, particularly among children and young adults, and especially on the recreational side. The Victorian Council includes representatives from Government Departments, local authorities and the University, as well as members chosen from the professions and from public life, and has succeeded in securing a very capable and enthusiastic staff. It has particularly interested itself in the encouragement of club-work and of recreational facilities for the youth of both sexes throughout the whole of the State. The National Fitness Council has conducted many training courses for the leaders in such work, and has organized "play days" for children on an extensive scale during holiday periods in many municipalities. The Council is also concerning itself actively with the development of community centre projects and is interested in the possible incorporation of our new schools of the future in such centres. A central bureau, attached to the Health Department at Canberra, serves to co-ordinate the work of the National Fitness Councils in the various States.

It is less encouraging to reflect, however, that there are as yet no proposals to increase child endowment to an extent which would guarantee the possibility of adequate nurture for every child, and that the proposals to improve educational facilities do not even aim at perfection. though it is quite clear that the quality of the "New Order," whatever its form, will depend just precisely on the extent to which our schools succeed in turning out civilised and educated human beings.

No leaders of any nation, even of the wealthiest, except perhaps those of Russia, have felt justified in asserting that their community will see to it that all its children are nurtured and educated as well as possible. Apparently none dare affirm on behalf of their people their adherence to any such set of principles as those of the "Rights of Man" published by the Sankey Committee.

Perhaps the leaders do not realize that justice, like charity, begins at home, and the the prerequisite of good behaviour between the nations is that the nations themselves shall be self-respecting and that no nation is self-respecting which does not do its best to look after its own children; or perhaps, in their blindness, the leaders are not sure that the nation could afford to do so or that the people would approve it.

Dr. Kincaid's report includes the customary details of the work in the health centres which, over the years, have played a great part in bringing about the improvement in child health which has been recorded.

There was a further reduction in the distribution of subsidised milk which has been diminishing since 1940, owing to the improved economic conditions, the average daily number of beneficiaries having fallen from 850 in 1940 to 298 in 1943. The amount of vitamin concentrates issued through the centres, shows an increase, as the value of these protective substances under special circumstances is being more widely appreciated.

INFECTIOUS DISEASES

Dr. Bull's report upon infectious diseases shows that there were no great changes in the situation. The low incidence of diphtheria in 1942 was continued, and the figure for 1943 was the lowest ever recorded. Of the 48 cases notified in the City, 21 occurred in institutions, so that there were only 27 cases among the general population. Though the fall in incidence was State-wide, it is satisfactory that the incidence among the population of the City was lower than amongst the aggregate populations of the metropolitan area and of the State.

The response to the offer of immunization against diphtheria was again fairly satisfactory, the number of pre-school children who were fully immunized in the Health Centres during the year being 638. This figure represents, however, too small a proportion of the births, i.e., of the newcomers in the population, particularly in view of the rise in the birth-rate, and unless the number immunized can be raised to a figure nearly equal to that of the births, the situation cannot be regarded with complete satisfaction.

In relation to diphtheria and infectious diseases generally there is a definite need for some administrative changes in the local government of the metropolis, in which the responsibility for dealing with infectious disease is shared by the Councils of the 29 municipalities, all contiguous, the inhabitants of which mingle freely in their daily lives and not infrequently move in the course of the year from one municipality into another. Some municipalities are more active than others in their endeavour to control infectious disease and to carry out preventive measures against such infectious diseases as diphtheria. Each authority become acquainted with the incidence of infectious disease in its own area, but not of that occurring in adjacent areas, perhaps across the street, and nobody knows within a reasonable time what is happening in the metropolis as a whole.

This Department is aware, for example, that there were three deaths from diphtheria in the City last year, but does not know and, under existing circumstances, cannot find out, how many deaths there were in the metropolitan area as a whole. Since the population of the metropolis is a single unit from the epidemiological point of view, the situation is a dangerous one and the lack of co-ordination may impede both the protective and preventive measures against infectious disease.

The high prevalence of scarlet fever has continued, contrary to expectation, but in the main the cases generally have been mild in character.

Six cases of typhoid fever were notified in the City, all connected with the remarkable milk-borne outbreak in the Cheltenham district of the metropolis.

Cerebro-spinal fever which, from previous experience, is expected to occur during war-time and became seriously epidemic in Melbourne last year, was fortunately less prevalent during 1943, though the number of deaths recorded was nine.

The situation regarding tuberculosis is disturbing. Dr. Bull shows that the number of notifications and of deaths in the City have been higher than in pre-war years, but owing to the absence of exact population figures and to the lack of administrative co-ordination throughout the metropolis already referred to, it is difficult to generalise as to the trend of the disease. Though the extent of tuberculosis is, to a large degree, dependent upon economic conditions, and though these generally have improved during the war, they conspicuously failed to do so in regard to housing accommodation and overcrowding, and this fact would certainly tend towards an increased spread of infection. It is very satisfactory, however, to know that definite steps have been taken by Governments, both State and Commonwealth, to overcome the lack of accommodation and to increase the subsistence allowances to affected families, which were matters discussed in my report of last year.

Under the heading of rubella i.e., German measles, Dr. Bull discusses the new importance which is now being attached to this disease, hitherto regarded as trivial. It seems that if women in the early stages of pregnancy contract the disease, though the mother herself suffers relatively little, the child when born is often found to have some serious defects. It may reasonably be hoped that some means of preventing this damage will be discovered.

DENTAL SERVICES

The dental services were continued during the year at the health centres in Kensington and North Carlton in a very satisfactory way and it is greatly to be regretted that both our dental officers found it necessary to resign at the end of the year. Owing to the great demand on dental services made by the Forces, it has been impossible to obtain successors, and the services have been temporarily suspended. Our best thanks are due to Mr. Byrne and Miss Woodcock for the work they have done.

FOOD SUPPLIES

Details regarding the inspection of food premises and the examination of foodstuffs are included in the attached report by the Chief Health Inspector, Mr. T. G. O. Jordan, upon the activities of his inspectional staff during the year.

The average quality of the milk samples examined for chemical composition was again very good. There was a small increase in the number of samples which failed to comply with the standard, due, in the main, to the greater number of samples taken from milk bars in which there had apparently been considerable carelessness, resulting in failure to keep the milk properly stirred. Dismissal of one prosecution of a milk vendor on the grounds of reasonable precautions indicates the desirability of a legal definition of "reasonable precautions" as in our opinion the precautions taken were not reasonable.

The results of the bacteriological examinations of milk samples were slightly better than those of last year though still inferior to those obtained up to 1940, when the present difficulties with regard to man-power, materials, etc., interrupted what was up to that time a progressive improvement.

The problem of the cleanliness and safety of the milk was a matter of great public concern during the year owing to the outbreak of typhoid fever in the Cheltenham district, which proved to be a classic example of a milk-borne outbreak responsible for over 400 cases and 22 deaths. As a result of this a Milk Pasteurisation Act passed by the State Government, provides for the eventual pasteurisation of all milk in the metropolitan and other areas of the State, and a Committee has been appointed under the Act, to draw up a scheme for the pasteurisation of the milk supplies of the metropolitan area. It is exceedingly unlikely, however, that it will be possible to ensure effective pasteurisation of the whole of the milk supply under the existing conditions of war. Proposals for the imposition of a legal standard for bacterial content were discussed during the year, but no action has, as yet, been taken to impose such a standard.

The difficulties associated with the supervision and control of the milk supply of the metropolitan area afford another illustration of the need for better co-ordination of the health services throughout the metropolis.

HOUSING

One very important factor affecting health which has seriously deteriorated during the war years is that of the quality of the housing. Whilst probably not as important as are some other factors such as food, it does nevertheless, exert a great influence, and the remedying of serious defects and shortages in housing is a slow and difficult matter. Faced as we are, therefore, with gross deficiencies, it is sad to say that only vague outline plans appear as yet to have been made to deal with the problem. There is a great shortage of houses with much overcrowding and there are many thousands of houses, especially in the inner areas of the metropolis, which should be condemned as unfit for habitation. The Housing Investigation and Slum Abolition Board reported in 1938 that there were, within 5 miles radius of the General Post Office, a large number (3,046) of houses fit only for demolition. Since then, a number have been demolished; (Mr. Jordan's report shows, for example, that in the City area 196 houses have been pulled down under the direction of the Housing Commission); but it is certain that since that time the position has become much worse.

There are within a few miles of the centre of the City hundreds of acres of land well suited for residential purposes and comprising a large proportion of the inner suburbs. The land is divided into blocks by streets which are, generally speaking, wide — often wider than necessary — and well paved. The blocks were sub-divided very many years ago without any regulation and are covered by a chaos of buildings, most of which are dwellings, though there are business premises of various kinds and many factories interspersed among them. Some of the houses scattered here and there throughout the blocks are reasonably sound and do, or could be made to, comply with the standard of habitability recently set up under the Housing Acts 1939. A large proportion, however, are so dilapidated and defective that they should be demolished. Most of the houses are of the single-fronted, single-storey, terrace type. They may be compared to tunnels or rabbit holes. Light, air and inhabitants can enter in front and emerge at the back, but there are no lateral openings. The little yard at the back, enclosed, as a rule, by a patch-work of rusty iron and wood, provides space for a closet, usually dilapidated. Such houses fail in every respect to comply with modern standards.

Plans are shown below of areas selected at random as samples in Carlton and North Melbourne respectively. The Carlton area (figure 1) covers just over 16 acres, including the small streets and alleys running through it. There are four vacant allotments and 294 premises within the area. The premises include one hotel, 20 factories and 273 dwellings of which 248 are of brick and 25 are of wood. One hundred and eighty-six of the houses are built upon blocks of 17 feet width or less, often much less, and only 41 are on blocks of 25 feet or over. A rough classification of their quality shows that only 80 of the houses appear to be in good order and that 196, or 71%, are either fit only for demolition or in such a state that they would require extensive alterations to make them comply with the standard of habitability.

The 298 blocks are owned by 158 individuals of whom 37 are living in the houses they own. The area is zoned as residential and it is safe to say that ten times as much of the residential area in Carlton is in a similar condition.

The illustration, (figure 2), shows an area in the residential section of North Melbourne, covering approximately 10 acres. There are upon it 193 allotments of which 12 are vacant. The buildings include two hotels, 15 factories and 164 houses, of which 123 are of brick and 41 are of wood. One hundred and sixteen of the houses are upon blocks of width 17 feet or less and only 25 on blocks of 25 feet or more. The quality of the houses has been roughly classified as follows:— 18 or 10% as good, 35 or 20% as fair and 124 or 70% as bad.

The 193 blocks belong to 106 owners of whom 23 occupy the houses they own. The area shown is representative of an area eight or ten times its size in the residential section of North Melbourne in which similar conditions prevail.

A further illustration (figure 3) shows four adjacent blocks in North Melbourne, zoned as residential, in which there are no fewer than 57 registered factories.

These illustrations are given to show the magnitude and difficulty of the problem which confronts us. A large proportion of houses in these hundreds of acres are unfit for habitation. Many of the remainder are very poor quality. It is to be hoped that the new houses to be built will not be houses of yesterday but houses of tomorrow, properly orientated, lighted, ventilated and equipped. It would be impossible to build such houses without re-planning a large part at least, of the areas concerned, and in such planning there will arise the problem of what is to be done with those properties which are of better quality and with the factories.

Most of the allotments are of such size and shape and so located that large scale reclamation will clearly be necessary, and just compensation must be assessed and paid. Questions of policy have yet to be decided and when this is done an immense amount of detailed planniing will be required in order that these very valuable sites can be put to good use instead of continuing as dangerous eyesores. There is so much to be done that it should not be left to any one small body All the authorities concerned should join in the task under the co-ordination of a town-planning authority. The time to begin is unquestionably now; otherwise, when the war does end, there will either be unnecessary delay or the work will be undertaken without proper consideration and with results which will be a monument to our indifference and lack of foresight.

Mr. Jordan's report gives a summary of the large amount of palliative work which has been carried out during the year under the heading of housing.

Other sections of Mr. Jordan's report cover the inspection of food premises and the maintenance of the sanitary condition of the City generally. The work accomplished stands to the credit of Mr. Jordan and his staff, and I am happy again to express my high appreciation of their efforts.

Yours faithfully,

JOHN DALE, O.B.E., M.D., B.Sc. (Public Health)

Medical Officer of Health.

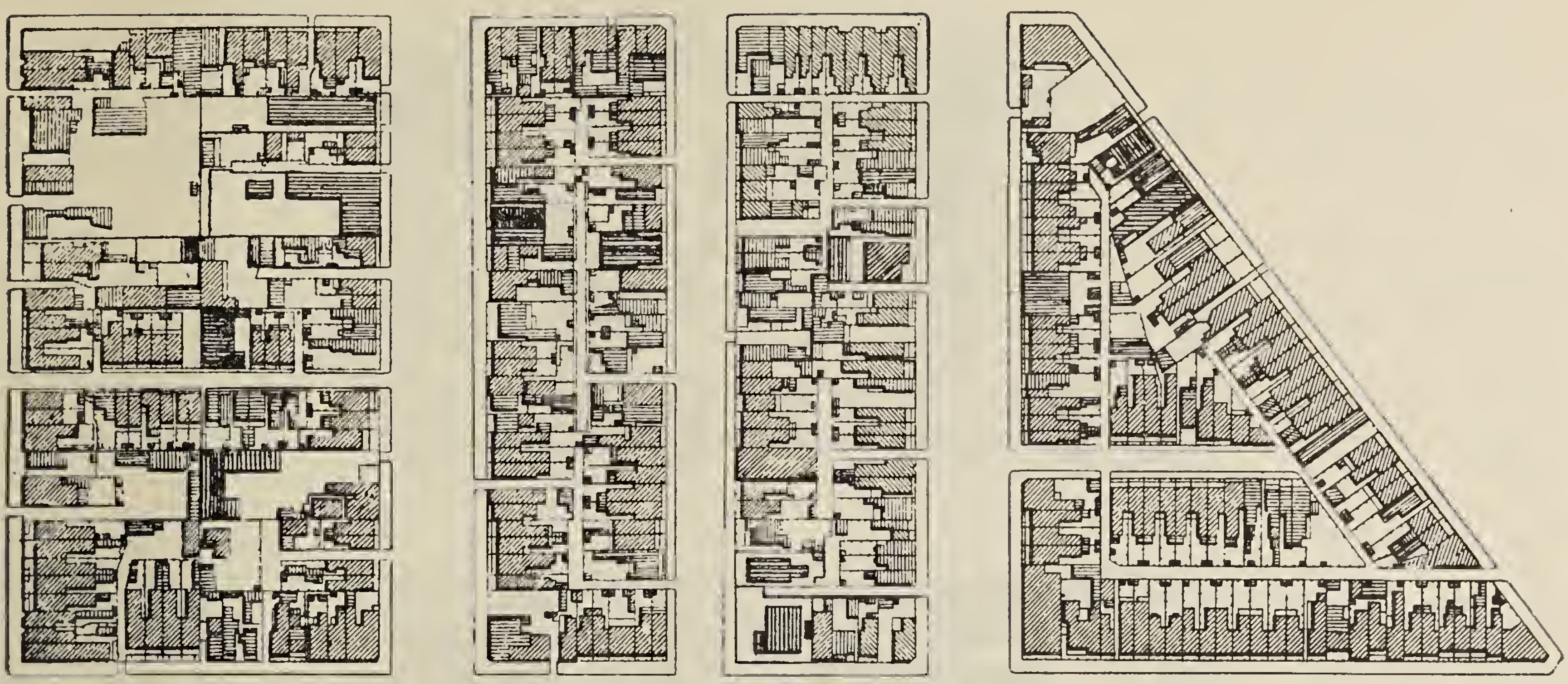

FIG 1

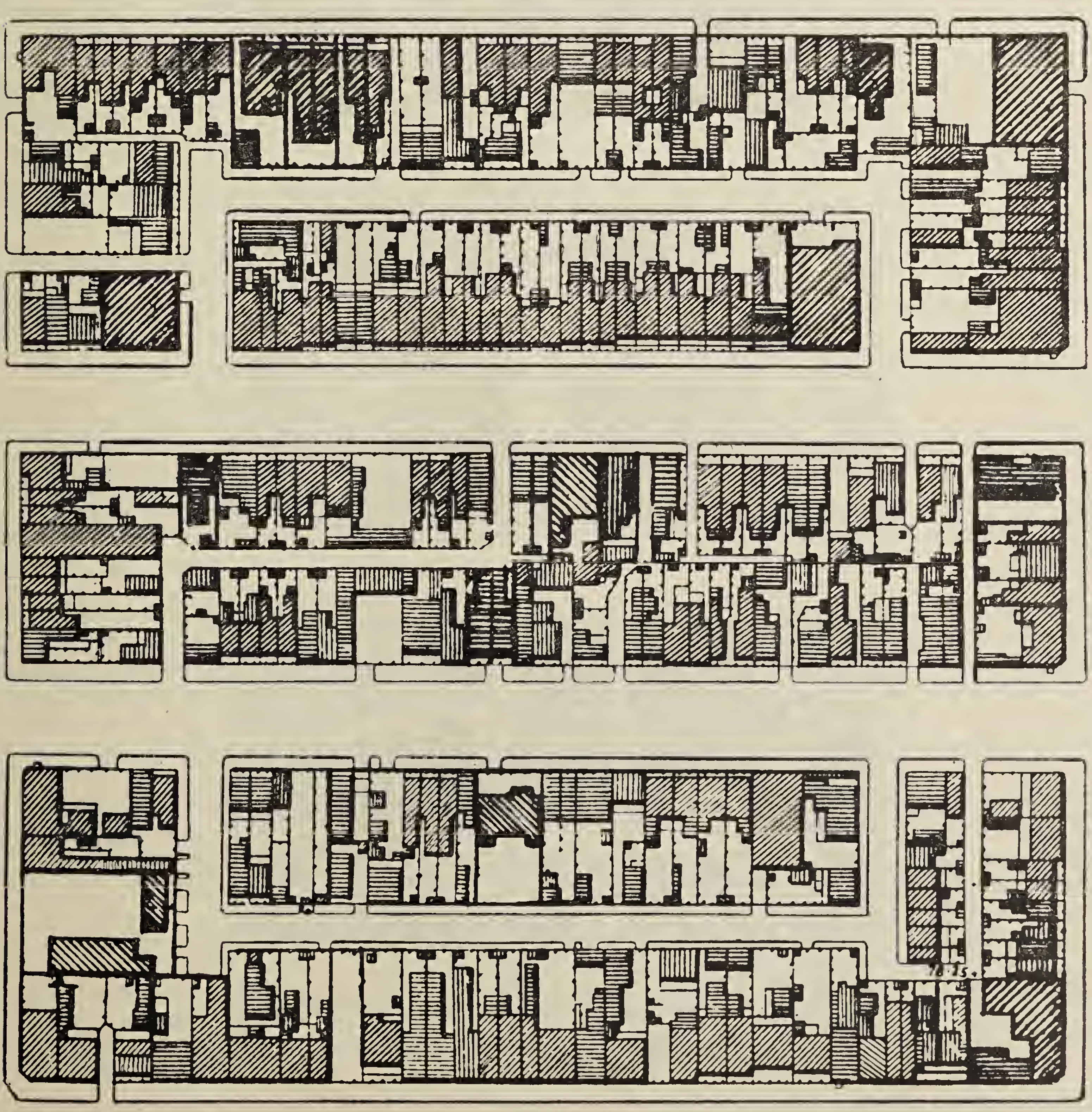

FIG 2

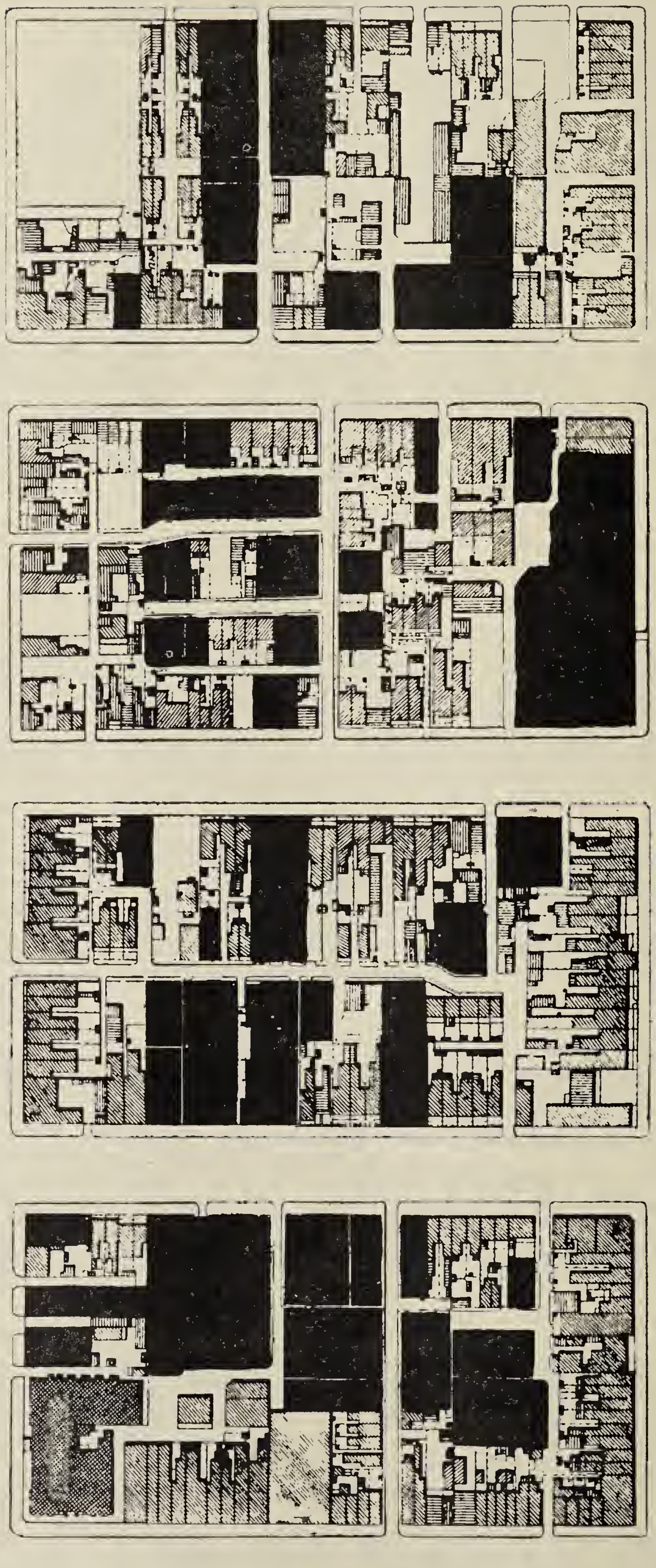

FIG 3—Showing Factories—shaded black—in 4 Blocks zoned as " Residential " in North Melbourne.

CHILD WELFARE.

Health Department,
Town Hall Chambers, Melbourne.
12th April, 1944.

The Medical Officer of Health:

Sir,

I have the honour to submit a report on the Child Welfare activities for the year 1943.

On the whole, the health of the children has been good. There have been no serious epidemics of either enteric or respiratory disease, and the death rate compares satisfactorily with that of the previous year.

An analysis of the records of pre-school children brings out some interesting facts. When the previous analyses of these records were made (the last being made in 1936) it was disconcerting to find a very low percentage of children without some physical defect. A large percentage of children as judged by American standards) was found then to be below average weight for height and height for age; and dental caries, which must be regarded as an indication of poor feeding or unsatisfactory dental hygiene, occurred in a large proportion. This year the percentage under average weight for height — as judged by exactly the same standards — has not materially altered, but the percentage under average height for age is appreciably less; the percentage with dental caries is considerably less, whilst the percentage of those without any physical defect has materially risen. Slight caries, treated or untreated, is regarded as a defect.

The dental work, combined with the persistent teaching in the Health Centres must have helped to bring about this improvement, but other favourable factors have arisen through war, paradoxical though it may appear. While war threatens a Nation's existence and kills its youth, it forces employment of all workers, causing the circulation of money and allowing the freer purchase of essential foods, provided these foods are procurable. Happily, here, we have not yet experienced the irony of changing from a state of food plentitude and monetary poverty to that of monetary plentitude with food poverty, and the rationing of such essential foods as butter and meat has only ensured an adequate supply to each individual.

Unfortunately, few parts of the world are in our happy position as regards food; but, with all the absurdities and tragedies of war, there is this compensation, that people begin to think in terms of real values instead of in artificial financial values.

The United Nations Conference on Food and Agriculture at Hot Springs was the first of its kind, where experts on all sorts of practical subjects spoke, not of politics or territorial boundaries, but of world production and distribution, in order to ensure freedom from want of all peoples in all lands, with very special emphasis on the needs of children, amongst whom there has been ample evidence of malnutrition throughout the world.

Probably of almost equal importance as food distribution are parent education, decent housing (involving cleanliness, adequate sleep and quiet security), and amenities for free exercise in the fresh air and sunlight. The latter are provided to a considerable extent by the playgrounds of our beaches, river banks and parks which are used by many of our children, but extension of education and good housing is urgently needed.

While the war has, in many cases, improved home conditions by increasing incomes, the entrance into industry of mothers with young children has, in some cases, made home conditions less satifactory. Kindergartens, creches and war-time nurseries have done their best to cope with the situation and, as a general rule, have endeavoured to assist mothers to obtain places of work where their time and energy will be least diverted from the home, at the same time arranging for the care of the children during the mothers' absence. With the entrance of mothers into industry, the eyes of authorities have been directed to the needs of the children of these mothers, and through them to the needs of other children, and, as a result, good universal standards may be made compulsory in all institutions dealing with little children. My impression is that fewer mothers of very young babies are leaving their babies to go to work than in the days of depression between 1928 and 1932, but I have no figures to confirm this.

Respiratory disease, as usual, was responsible for the majority of deaths between one month and five years. Little children are very susceptible to respiratory disease, and because this is so, the question has risen as to whether it is wise to bring little children together in groups, as in kindergartens and creches, because their chance of infection may thereby be increased. When there is any prevalence of the recognized infectious diseases such as diphtheria, scarlet fever, whooping cough, measles and mumps (which mostly attack children and not many adults. because of their immunity) it may not be wise to do so. But with respiratory diseases of a more or less minor nature, such as the common cold, children inside a kindergarten group appear to be no more exposed to infection than those outside. In certain seasons of the year, colds are extremely common throughout all our families, and frequently it is an adult who introduces the infection into the home.

The large amount of respiratory disease and the rapid spread of colds, influenza and so on through our communities, is one of the penalties we pay for our un-natural, but civilized, habit of herding people together in groups in buildings and vehicles.

If people must be crowded together to suit the demands of modern civilized life, it is imperative that education as to the mode of spread of these diseases should be so universal that the person who coughs or sneezes or talks directly at another person or at another person's food should be ostracised by common consent. We have lowered the incidence of alimentrary diseases tremendously in our communities by attention to alimentary hygiene and we could lower the incidence of respiratory disease to a very great extent by attention to respiratory hygiene. Coughing, sneezing laughing or talking at another person should be just "not done."

Children, naturally are the worst offenders in this respect and are quite careless of where they cough but they must be taught care and consideration. Although children, because of their ignorance, are possibly the worst offenders many adults are little better, and it is all too common for an adult to get an infection at work, to bring it home and spread it to all the family. Mothers with colds nearly always infect their babies, and few babies in contact with mothers with open tuberculosis escape.

The seriousness of the several respiratory diseases varies tremendously, of course, but even the ordinary mild common cold may be the precursor of a pneumonia or broncho-pneumonia which can cause death. Such diseases as tuberculosis and diphtheria are frequent causes of death, and, because they are known to be serious, people generally do exercise care against their spread once they are diagnosed. But, unfortunately, they are often more dangerous to contacts before they are diagnosed than after. Mild or serious, all the respiratory diseases are super time-wasters, and whether it be to avoid a very serious disease or to side-step a time-wasting nuisance, it is well worth while developing routine habits, which minimise infection. Children in kindergartens and in schools, can be taught such habits, and adults, by means of posters, films and lectures can be shown how infection is spread and how to avoid it.

Respiratory diseases have killed more people than any war and have probably wasted more time than any strike, and it is up to us to cease deliberately exposing ourselves and others to their menace.

Cessation of Dental Work.

It is with regret that we were obliged to temporarily close the dental section at the Newry Street Centre in September, owing to Miss Woodcock's absence We hope that she will be able to resume her work there later. At the time of writing this report, the dental section at Kensington is also closed following Mr. Byrne's resignation We are very sorry indeed that Mr. Byrne found it impossible to carry on. I would like to pay a tribute to his enthusiastic treatment of the children and educational work with the mothers.

New Health Centre in South Yarra.

Early in October a new Health Centre was opened in The Kiosk, at Fawkner Park. This Centre is open on one afternoon a week and is conducted by Sister Leaney from the Carlton Health Centre, assisted by Sister Polkinghorne .The forming of a Centre here was made necessary by the increasing number of babies born in the surrounding district, where numbers of young couples now live in flats. Previously the number of births in that area had been small, and mothers had been recommended to take their babies either to the Victorian Baby Health Centres Training School, or to Prahran Health Centre. With an increasing demand for advice this arrangement was not satisfactory. Appreciation of the Centre is shown by the fact that the number of attendants has increased each week since it was first opened on 6th October.

Training Courses.

During the year, 12 Sisters doing their Infant Welfare course at the Presbyterian Babies' Home, attended our Centres for instruction and practice in the Centre work required for their course. The Sisters from this Training School have attended our Centres in this way since 1940.

TABLE SHOWING VOLUME OF HEALTH CENTRE WORK.

	Council Centres		Training Centre (V.B.H.C.)		Total	
	1942	1943	1942	1943	1942	1943
No. of new babies	1136	1172	237	277	1373	1449
No. of individual babies under 1 year	1186	1202	127	133	1313	1335
No. of individual babies between 1 and 2 years	988	1046	41	47	1,029	1093
Total number of individual babies under 2 years	2174	2248	168	180	2342	2428
Total attendances of babies under 2 years	22,895	25,368	3000	3031	25,895	28,399
Total number of new expectant mothers	146	136	15	14	161	150
Total number of individual expectant mothers	193	174	4	7	197	181
Total consultations with expectant mothers	461	407	51	24	512	431
Visits by nurses to mothers or babies	5433	4987	639	697	6072	5684
No. of times babies referred to doctor or hospital	450	501	72	87	522	588
No. of children new to pre-school sessions	496	582	6	10	502	592
No. of individual pre-school children	1352	1334	13	16	1365	1350
Total attendances of pre-school children	4109	4605	119	106	4228	4711
Visits or consultations re pre-school children (apart from sessions)	2810	2796	—	—	2810	2796
No. referred to Dental Hospital	182	263	—	—	182	263
No. of pre-school children examined at their own Kindergartens	—	—	—	—	288	424

EDUCATION IN MOTHERCRAFT

The course of lectures on hygiene and mothercraft to senior girls in the City Schools was given as usual by Sister Shaw. The interest which these girls take in the lectures is evidence that they are educable along these lines. One could wish that every child would leave school with a good working knowledge of general hygiene, of human physiology and anatomy, and of fundamental dietary principles. Seven schools presented 210 pupils for Sister Shaw's lectures: 167 sat for the examination; of these 58 obtained a special certificate, 93 passed and 16 failed to pass the examination.

BREAST FEEDING RECORDS THROUGHOUT OUR CENTRES COMPILED FROM THE SISTERS' QUARTERLY REPORTS OF THE FEEDING OF INDIVIDUAL BABIES AT THEIR LAST ATTENDANCE BEFORE THE REPORT IS MADE.

	Under three months of age			Three to six months of age			Six to nine months of age		
	Entirely Breast Fed	Partially Breast Fed	Total	Entirely Breast Fed	Partially Breast Fed	Total	Entirely Breast Fed	Partially Breast Fed	Total
1927	86.6%	7.3%	93.9%	58.5%	15.8%	74.3%	52.2%	17.4%	69.6%
1928	83.8%	5.4%	89.2%	60.1%	13.4%	73.5%	45.8%	17.6%	63.4%
1937	74.3%	13.7%	88.0%	52.6%	22.2%	74.8%	31.6%	23.1%	54.7%
1938	72.0%	14.3%	86.3%	46.1%	23.1%	69.2%	27.6%	23.0%	50.6%
1939	70.3%	14.9%	85.2%	47.2%	22.4%	69.6%	28.9%	20.6%	49.5%
1940	67.3%	12.2%	79.5%	45.7%	17.2%	62.9%	34.3%	11.5%	45.8%
1941	63.9%	15.7%	79.6%	43.7%	10.3%	54.0%	31.7%	10.4%	42.1%
1942	55.3%	13.6%	68.9%	38.8%	11.2%	50.0%	31.8%	10.3%	42.1%
1943	61.9%	12.3%	74.2%	43.0%	12.1%	55.1%	32.9%	8.9%	41.8%

MILK AND ACCESORY FOOD SUPPLY FOR CENTRE ATTENDANTS

The amount of wet milk supplied through the Centres was 1,223 pints (all of which went to tuberculous families, the average number of recipients being 45).

The amount of dried milk supplied through the Centres to babies and pre-school children was 24,456 lbs.

This was 529 pints less wet milk and 733 lbs. less dried milk than was supplied in 1942.

The total number of recipients during 1943 was 608, the average at any one time being 298. Ninety-four families received help for the whole year. Eighty-nine gallons of iron and vitamin concentrate were distributed. In 1942, the total number of milk recipients was 769, the average at any one time being 411.

MATERNAL MORTALITY

We received notifications of six deaths connected with pregnancy or labour, viz:—

Septicaemia associated with abortion (all Coroner's cases, all married. Ages 26, 27 and 31. All occupied with home duties only.)	3	All died at the Women's Hospital
Ruptured ectopic pregnancy (both single, one aged 28, a saleswoman and one aged 29, a factory employee.)	2	One died at the Women's Hospital and one at a private hospital.
Pelvis cellulitis and thoracic empyema (single, home duties.)	1	Died at Women's Hospital.

BIRTHS AND INFANT MORTALITY

The number of births notified during the year was 1,524 and the number of infant deaths was 78 (53 being neonatal and 25 aged between one month and one year). After allocation to the City by the Government Statist of 280 births and one infant death, the infantile death rate as computed by him, was 43.79—the neonatal death rate as 28.82 and the death rate of those between one month and one year as 14.97.

Infantile Death Rates.

	Neonatal (under one month)	Between 1 month and one year	Total
1932	27.1	30.9	58.0
1933	26.4	21.3	47.7
1934	30.4	19.6	50.0
1935	26.0	23.3	49.2
1936	24.8	29.2	53.9
1937	28.1	13.6	41.7
1938	26.0	13.8	39.8
1939	26.2	10.0	36.2
1940	42.2	11.9	54.1
1941	24.6	12.3	36.8
1942	25.3	18.6	44.0
1943	28.8	14.9	43.7

Neonatal Deaths

The causes of the 53 neonatal deaths notified were:—

Prematurity (uncomplicated)	14
Prematurity with atelectasis	10
Prematurity with gastroenteritis	3
Prematurity with bronchopneumonia	1
Prematurity wth syphilis	1
Prematurity with congenital heart	1
Inanition (one with pneumonia)	2
Atelectasis	3
Asphyxia neonatorum	1
Cerebal haemorrhage	3
Congenital heart	1
Mongolism with congenital heart	1

Mongolism with pneumonia	1
Mongolism	1
Lobar pneumonia	1
Bronchopneumonia and heartfailure	1
Bronchopneumonia and dietetic problem	1
Microcephaly and asphyxia	1
Erythroblastosis	1
Icterus neonatorum	1
Hypothermia	1
Dysphagia	1
Exomphalos	1
Murder by smothering	1

Nothing of special significance emerged from a study of the histories obtained in connection with the neonatal deaths from prematurity. Somewhat more than half of these babies were born in public hospitals, only two were born at home and the rest were born in private hospitals. All but two had had antenatal attention. About 65% were first children, but there were also second, third and fifth children. The ages of the parents ranged from 17 to 42 years. Three sets of twins died and one member of two other sets of twins died; that is, eight deaths occurred in twin births. Only two mothers were single. but one married mother gave birth to ex-nuptial twins who died The husbands of all married mothers were employed or in the Forces, and there appeared to be no real financial embarrassment or lack of adequate diet in any case.

Three of the neonatal deaths notified were of babies whose mothers had come to the City only for the birth but failed to give any permanent address.

The three deaths from gastroenteritis in premature babies occurred when an epidemic broke out in the premature baby ward at one of the hospitals.

The neonatal death rate as notified does not show signs of diminishing. One can hardly expect it do so while obstetric hospitals are congested and short-staffed. Each premature baby's chance of survival is directly proportional to the amount of skilled care which can be given to it and to the mother's breast milk supply. It is now known that some wastage of infant life results from the union of parents whose blood factors are incompatible. When more knowledge is gained on this subject it is possible the wastage may be lessened. One would like to think that although the neonatal deaths have not decreased, there might be a decrease in the still-births, giving a greater proportion of live births, but, unfortunately, there has been no diminution in the notifications received of still-births.

In 1941 24 still births were notified (in which were three separate twins).

In 1942 18 still births were notified (in which were one pair of twins and one separate twin).

In 1943 28 still births were notified.

Deaths Notified between One Month and One Year.

The causes of the 25 deaths notified, at this age were as follows:—

Uraemia and gastroenteritis	1
Enteritis	1
Malnutrition and marasmus	1
Dehydration and dietetic dyspesia	1
Lobar pneumonia	1
Bronchopneumonia	3
Bronchopneumonia and whooping cough	1
Bronchopneumonia and malnutrition	1
Bronchopneumonia and acute laryngitis	1
Bronchopneumonia and congenital heart	1

Congenital heart	1
Thoracic empyema (one with cerebal degeneration)	2
Meningococcal meningitis	2
Meningococcal septecaemia	4
Influenzal meningitis	1
Inanition and meningocele	1
Double hernia and prematurity	1
Asphyxia from suffocation	1

Seven of these children were fairly regular Centre attendants and were progressing well. In each of these the illness which caused death was of sudden onset. Four were not known to the Centres at all; six were hospital patients on account of sickness or frailty from soon after their births, and one was a triplet with a congenital heart. Seven were home-visited regularly and in at least four of these the mothercraft was very poor.

Deaths Occurring in Children Aged between One and Two Years

Deaths were notified as follows:—

Influenzal meningitis	1	Pneumonia and cerebral degeneration	1

Both of these children attended a Centre, one (influenzal meningitis) being an apparently strong, healthy child, whilst the other was a mentally defective child with a cleft palate, whose progress in every way was sub-normal.

Deaths occurring in children aged between Two and Six Years of Age were 12 in number and as follows:—

- Bronchopneumonia (2 years. Not known to Centres).
- Acute bronchitis and pulmonary oedema (3 years. Not known to Centres.)
- Scarlet fever (3 years. Not known to Centres. An inmate of an institution.)
- Laryngeal diphtheria (3 years. Not known to Centres. An inmate of an Institution.)
- Bacillary dysentery (2 years. Not known to Centres. An inmate of a Mental Hospital.)
- Hydrocephalus and bronchopneumonia (3 years. Known to Centres but an inmate of a Mental Hospital.)
- Appendicitis and peritonitis (2 years. A fairly regular Centre attendant. Sudden onset in an apparently healthy child.)
- Caustic soda poisoning (2 years. Not known to Centre until child was brought to Melbourne for treatment.)
- Cyclic vomiting and acidosis (5 years. At its last Centre attendance at 15 months of age its record was "a well-developed child progressing very well.")
- Cerebellar tumour (5 years. Attended Centre fairly regularly but only occasionally as a pre-school child. Centre record shows that tonsils were very unhealthy and tonsillectomy had been persistently recommended for three years but not done.)
- Burns from ignited clothing (5 years. Known to Centres but did not attend.)
- Gunshot wound in the head (5 years. Manslaughter. Known to Centres.)

FINDINGS FROM RECORDS OF PRE-SCHOOL CHILDREN ATTENDING THE CENTRES COMPARED WITH SIMILAR FINDINGS IN 1936.

Age	Year	More than 7% below av. weight for height	More than 4 mths. below av. height for age	Defective teeth treated and untreated	Nose and throat defects (not treated) + (already operated on)	No defects detected	No. of records examined
2-3	1943	15.5%	19.0%	6.8%	7.2% + 1.5%	61.3%	321
	1936	19.8%	28.4%	24.0%	6.6% + 2.4%	33.0%	362
3-4	1943	20.2%	35.2%	33.7%	11.7% + 8.5%	34.8%	281
	1936	16.1%	45.2%	53.1%	11.4% + 8.6%	18.0%	254
4-5	1943	27.6%	21.4%	62.5%	10.5% + 13.6%	20.6%	257
	1936	23.9%	32.7%	74.3%	13.0% + 18.0%	8.0%	238
5-6	1943	35.6%	21.0%	81.4%	7.0% + 23.5%	10.1%	157
	1936	29.9%	29.8%	85.0%	14.4% + 27.8%	2.5%	194
All ages 2-6	1943	23.0%	24.4%	39.9%	9.2% + 9.9%	35.8%	1016
	1936	21.7%	33.8%	54.0%	10.6% + 12.2%	18.8%	1044

The biggest percentage of children without physical defect was found in the records of the North Carlton area. The smallest percentage in the records of the North and West Melbourne area, while the records of the Kensington and Carlton areas showed an intermediate percentage.

KINDERGARTENS

Children from The Lady Gowrie Centre, The Lady Huntingfield Centre and from the five Church of England, five Roman Catholic, two Presbyterian and two Union Kindergartens, were examined. The authorities in charge of all these kindergartens are making an earnest endeavour to render service of satisfactory standard to the children in the kindergartens. The Kindergarten Union has for many years had a trained supervisor for all its kindergartens. The Presbyterian Church appointed a similar supervisor last year, and just recently the Church of England followed suit and secured the services of the ex-Director of the Melbourne Lady Gowrie Centre.

CRECHES.

Creches as now maintained present a very real problem owing to the extreme difficulty of providing adequately for a number of children of different ages, say, from 3 months to 3 or 4 years, without enough money, space, equipment and trained staff for the needs of these different ages. It is difficult to assess the real social value of these institutions as now conducted, and with so little contact with or knowledge of the parents or homes of the children.

ACKNOWLEDGMENTS.

I wish to thank Dr. Bull for her supervision of the children at the Pigdon Street Health Centre and to express my appreciation of the tirelss and efficient work of all the Health Centre Sisters and to thank very sincerely the voluntary helpers who so generously give their services.

HILDA E. KINCAID, D.Sc. ,M.B., B.S.

INFECTIOUS DISEASES.

Health Department,
Town Hall Chambers, Melbourne,
18th April, 1944.

The Medical Officer of Health:

Sir,

I have the honour to submit a report on the incidence and control of infectious diseases in the City of Melbourne for the year 1943

DIPHTHERIA.

TABLE I.

Year	No. of Cases	Cases per 100,000	Deaths	Case Fatality	Fatality per 100,000
1915-24 (average)	373	355	14	3.7	13
1925-34 (average)	230	239	6	2.9	7
1935	257	266	7	2.7	7
1936	241	259	5	2.0	5
1937	127	137	2	1.5	2
1938	103	111	1	1.0	1
1939	110	118	2	1.8	2
1940	100	106	2	2.0	2
1941	235	246	9	3.8	9
1942	56	59	1	1.8	1
1943	48	48	3	6.2	3

The low incidence of diphtheria in 1942 was maintained for 1943, and it will be seen by the above table that except for the sudden and severe epidemic of 1941, the figures show a continuous decline for the last seven years. Undoubtedly the low rates in the years 1937-1940 tended to give people a false sense of security and made them less responsive to the offer of immunization; but the successful campaign of 1941 is evidently still bearing fruits, and although the numbers presenting for immunization are smaller than in that year, they are higher than in the preceding years. In Toronto, where the most spectacular success was attained by a very vigorous campaign against diphtheria, they were able to present an absolutely clean sheet for 1940, not a single case being recorded. However, the same slackening occurred as is usually observed when the threat of danger is passed, immunization fell off, and the number of cases has risen again, though it is still remarkably low for a city of 600,000 inhabitants. There is no doubt that the key to the position is the response among infants and pre-school children, and, on the whole, this is fairly satisfactory among children attending Health Centres in the City of Melbourne.

The percentage of immune children among those tested in the schools and kindergartens during the year was 71 compared with 58 in 1942 and 52 in 1941. For the last two years, we have reverted to our practice of testing only the group below 10 years of age, as those in the older groups have had many opportunities of being tested, and in fact show such a high percentage of immunity that further testing is unnecessary. From these figures it appears that immunity is being well maintained, and this is supported by the low rate of incidence of the disease during the last two years.

Incidence.

The incidence in spite of the increase in the population figures for the City, is the lowest ever recorded. There were 48 cases, 17 in males and 31 in females. Twenty-one of these cases were institutional, leaving the remarkably low figure of 27 cases in the general population.

Deaths.

There were three deaths, two were males and one female. One was a man of 37, who developed nephritis and bronchopneumonia, and died after two months' stay in hospital. The other male was a boy of three in an institution where a case had occurred, and the children had been swabbed and tested. He was found to be Schick positive; but contracted the disease before receiving any treatment. It was a case of laryngeal diphtheria and he died in twenty-four hours after the first signs of illness were noted. The female was a girl of 15, who had recently come to the City from the country. She contracted a malignant form of the disease and died of heart-block and toxaemia. None of the cases had been immunized.

Rates.

The rate per 100,000 cases of diphtheria, 48.3 is the lowest ever recorded in the City. This is remarkable when the influx of new inhabitants is considered, as this often leads to an increase of infection. The fall was noticeable throughout Greater Melbourne and the whole State, but for the second year in succession the figures for Melbourne City are below those of the Metropolitan area, and the State. The comparative rates were:—

	1943	1942
Melbourne City	48	59
Nine Adjacent Municipalities	64	101
Greater Melbourne	50	65
Whole State	67	68

TABLE II.

AGE INCIDENCE

Age	MALES Cases	FEMALES Cases			Percentages
0-1 year	—	—	7 males 7 females	14	29%
1 year	1	1			
2 years	1	3			
3 years	2	—			
4 years	3	3			
5 years	2	7	6 males 11 females	17	36%
6 years	1	2			
7 years	—	1			
8 years	2	—			
9 years	1	1			
10 years	—	—	2 males 2 females	4	8%
11 years	1	—			
12 years	—	—			
13 years	1	2			
14 years	—	—			
15 years and over	2	11	2 males, 11 females	13	27%
Totals	17	31			

INSTITUTIONAL CASES.

As already stated, 21 cases occurred in institutions. Most of the inmates of institutions are only temporary residents of the City, and have had no opportunity of receiving protective treatment, though where they make a longer stay they are tested and immunized at regular intervals. Eleven cases were in institutions for children, and 10 in public hospitals. Fifteen cases were in children under 15 years of age, and six were over 15.

TABLE III.

NUMBERS OF INSTITUTIONAL AND GENERAL CASES.

Year	Total	Institutional	General
1931	308	27	281
1932	310	40	270
1933	307	86	221
1934	215	31	185
1935	257	38	219
1936	241	21	220
1937	127	9	118
1938	103	22	81
1939	110	53	57
1940	100	37	63
1941	235	15	220
1942	56	12	44
1943	48	21	27

The institutionl cases were 6.4 per cent. in1941, 21 per cent. in 1942 and 44 per cent. in 1943, illustrating the comparative fall in incidence among the general population.

Diphtheria in Families.

There was only one case of multiple infection in a family in 1943.

Diphtheria in Individuals previously treated.

There were two cases of diphtheria in children who had been previously immunized, neither severe. One had been re-tested and found to re-act faintly to the Schick test but was not re-immunized because he also reacted to the Moloney test. As no method of immunization is 100 per cent. successful with one course of treatment an occasional case in an immunized child is to be expected. They are very few, and in no way detract from the value of the procedure.

Carrier Rate for Diphtheria in a Sample of the Metropolitan Population.

Table IV shows the results of swabbing of all new entrants at an institution for children, where most of those admitted come from the metropolitan area. Two of the positive swabs were tested for virulence and of these one was shown to be non-virulent, and the other could not be isolated.

TABLE IV.

Year	No. examined	Negative	Positive	Virulent
1940	964	952	12	1
1941	1058	1045	13	4
1942	736	731	5	1
1943	600	596	4	—

Swabs

Five hundred and twenty-eight swabs were taken among contacts of cases of diphtheria, 185 being in an institution for children where three cases had occurred. Seventeen throat and two nasal swabs were positive.

Throat Conditions.

One thousand, one hundred and forty-two children presenting for immunization were examined for defective conditions of the nose and throat. Children in Health Centres, kindergartens and institutions were not examined as they have their own medical officers. Of these 1142 children, 684 were considered satisfactory, 143 had enlarged tonsils and 315 showed evidence of previous tonsillectomy. In previous years the percentage of those requiring attention varied from 12-15 per cent. In this sample the figure is 12 per cent. The number who had already been operated on was considerably above the average of 18-20 per cent, being nearly 28 per cent. This may be due to the campaign two years ago, when children were being examined for evacuation and the Chief Medical Officer of the Education Department made special arrangements with the hospitals to do this work. On the whole, the throat conditions show an improvement through the years.

IMMUNIZATION

Immunization was carried out in the Health Centres, schools and institutions as usual. Owing to the organizational difficulties in arranging for three doses of Anatoxin in the schools, it has been decided to use Alum-precipitated toxin for children under eight years of age. This material has shown a very high percentage of immunization with two doses, as is shown by the figures given later, for re-tests in the Health Centres.

Immunization in Health Centres

The number of children immunized at the Health Centres (638) is the highest recorded, except for the year 1941, when the "scare" was responsible for crowding the centres with anxious parents, many of whom had been unwilling previously to have their children tested. Considering the constantly moving population, the response is very satisfactory.

TABLE V.

Year	Total Individuals	Immunized			Two or three doses
		1	2	3	
1940	741	63	72	365	437
1941	1462	73	136	980	1116
1942	1139	76	452	47	499
1943	1198	85	638	—	638

RETESTS

During the year children who had received two immunizing doses of alum-precipitated toxoid were re-tested three months after their second injection as a guide to the rapidity as well as the efficacy of the preparation. Of 292 children tested, only eight showed any indication that immunity had not been established, and in only three of these was the result at all definite. In the other five, the reaction was very faint, so that the measures taken were almost one hundred per cent. successful. However, tests in the future will be done after longer intervals as a drop might be expected in a few cases after the peak of protection has been reached.

TABLE VI.

	Total Presenting	Schick Negative	Schick Positive	Not immunized	Not recorded	Immunized 1	Immunized 2
HEALTH CENTRES—							
Swanston Street, Carlton	168	57	9	1	—	14	96
Pigdon Street, North Carlton	80	30	3	—	1	3	46
Newry Street, North Carlton	226	65	7	1	4	18	138
Kensington	358	151	5	2	4	21	180
Town Hall, North Melbourne	212	81	9	2	7	22	100
Abbotsford Street, North Melbourne	154	59	7	5	5	7	78
Totals	1198	443	40	11	21	85	638
SCHOOLS & KINDERGARTENS—							
Errol Street	175	126	40	4	9	8	28
Flemington	106	63	40	4	3	4	32
Pigdon Street	117	82	23	2	12	5	16
Holy Rosary	61	36	17	—	8	7	10
St. Brendan's	101	63	27	2	11	5	20
St. George's	43	23	15	2	11	5	8
St. John's	100	52	43	4	5	7	32
Yarra Park	89	58	26	4	5	3	19
King Street	74	47	18	2	9	3	13
Faraday Street	89	62	21	2	6	5	14
Boundary Road	58	37	15	2	6	2	11
Lee Street	246	162	55	8	29	7	40
St. Michael's	80	48	26	4	6	3	19
Kensington	151	108	26	5	17	4	17
St. Mary's	79	59	13	4	7	2	7
Rural School	27	20	5	—	2	—	5
Rathdown Street	93	65	20	1	8	5	14
St. Jude's	45	16	18	1	2	3	23
Robertson Street	22	12	10	—	—	4	6
Totals	1756	1139	458	51	156	82	334
HOSPITALS and INSTITUTIONS—							
Medical Students	82	52	30	5	—	5	20
Children's Welfare Department	375	150	92	10	49	50	116
Melbourne Hospital	125	62	63	2	—	4	57
Alfred Hospital	101	41	60	5	—	5	50
Children's Hospital	37	16	21	3	—	1	17
Salvation Army Home	31	17	13	1	1	3	9
Mercy Hospital	19	10	9	1	—	1	7
Totals	770	348	288	27	50	69	276
Grand Totals	3724	1930	786	89	227	236	1248

SCARLET FEVER.

TABLE I.

Year	No. of Cases	Cases per 100,000	Deaths	Case Fatality	Deaths per 100,000
1931	246	256	3	1.2	3
1932	209	222	1	0.5	1
1933	131	142	1	0.8	1
1934	100	108	—	—	—
1935	73	77	—	—	—
1836	70	75	—	—	—
1937	50	54	—	—	—
1938	202	217	1	0.5	1
1939	325	348	1	0.3	1
1940	244	260	1	0.4	1
1941	240	251	—	—	—
1942	152	159	—	—	—
1943	285	287	2	0.7	2

Scarlet fever, except for the year 1942, has been very prevalent for the last six years, not only in the City but over the whole State. The number of cases per 100,000 for the nine adjoining municipalities was 309, for Greater Melbourne 344 and for the whole State 301.

There were 285 cases in the City of Melbourne, 100 in males and 185 in females. There were two deaths, one in a boy of three years, the inmate of an institution for children, who died in a few days of complicating bronchopneumonia, and one in a girl of 19, who contracted the disease while she was a patient in a ward at a public hospital.

TABLE II.

AGE INCIDENCE OF SCARLET FEVER.

Age	MALES	FEMALES			Percentages
0-1 year	2	—	28 males 29 females	57	20%
1 year	4	3			
2 years	8	9			
3 years	6	7			
4 years	8	10			
5 years	8	5	40 males 49 females	89	31%
6 years	13	13			
7 years	10	12			
8 years	5	9			
9 years	4	10			
10 years	7	4	23 males 22 females	45	16%
11 years	7	7			
12 years	5	5			
13 years	1	4			
14 years	3	2			
15 years and over	9	85	9 males 85 females	94	33%
Totals	100 males	185 females			

It will be seen by the above table that the great preponderance of cases in females is chiefly in the young adult section. This has always been a marked feature of scarlet fever incidence; but the greater susceptibility, or the lack of resistance, to infections in the young female has been noted, for instance, in the very high proportion of Schick reactors in this group, and in the figures for tuberculosis and poliomyelitis, and constitutes a very puzzling sex characteristic at these ages.

Scarlet Fever in Institutions.

There were 64 cases of scarlet fever in institutions, 60 of which occurred in hospitals, 55 in adults, of whom two were patients, and five in children in the wards. Three cases occurred in an institution for children and one in another institution. There were 53 cases among the staffs of these hospitals, a high figure which may be the result of the suspension of immunization against scarlet fever owing to administrative difficulties due to the shortage of staff. It is hoped to resume this work as soon as it is possible to arrange it.

Swabs in Scarlet Fever contacts.

One hundred and forty-four swabs were taken, chiefly among scarlet fever contacts, though a few were from the patients of private doctors, who asked for swabs before releasing the families from quarantine. Of these, 15 nasal and 16 throat swabs showed the presence of Group A haemolytic streptococci.

Standardisation of Scarlet Fever Toxin.

At the request of the Director of the Commonwealth Serum Laboratories we undertook the testing of a new batch of scarlet fever toxin for the purpose of standardisation. This had been previously tried out on white rabbits, but in order to estimate the strength accurately, these results had to be confirmed by tests on human volunteers Over one hundred individuals, including nurses, members of the Town Hall staff, and medical students in the Public Health class of the Medical School, were good enough to co-operate, and several hundred tests were performed with varying dilutions of the toxin. The results were confirmed by testing against the local standard toxin, and the Dochez toxin from America. A satisfactory standard was arrived at, and the results agreed remarkably well with the previous animal tests. The standardisation of this toxin is of some importance in view of the probable necessity for further immunization against scarlet fever if the incidence remains so high.

Inquiries into Social Conditions of Families Visited on account of Infectious Disease.

The number of families visited during the year was larger than in 1942, owing to the great increase in the number of cases of scarlet fever. It has always been observed that scarlet fever shows no predilection for the families living in poor, over-crowded conditions. This is borne out by the rates per 100,000 in the more prosperous municipalities where the diphtheria rate is usually low, but the scarlet fever rate is as high or higher than that in the crowded suburbs, so that as a sample of population this year's figures would be expected to show a more favourable state of affairs than, for instance, for the year of the diphtheria epidemic in 1941.

All families where infectious diseases occur are visited but it is not always possible to get complete data. Records were available for 231 families, 30 with diphtheria cases, 183 with scarlet fever, and 18 with cerebro-spinal meningitis. In the 30 families where diphtheria occurred, 153 persons, 76 adults and 77 children were living in 125 rooms, i.e., 1.2 persons per room compared with 1.1 last year.

In the 183 families where scarlet fever occurred, 1147 persons, 613 adults and 534 children were living in 988 rooms, i.e., 1.16 persons per room compared with 0.9 in 1942.

In the 18 families where meningitis occurred 101 persons, 52 adults and 49 children, were living in 67 rooms, i.e., 1.5 persons per room, compared with 1.1 last year.

It will be seen that there is a slight increase over the figure found in former years, of 1.1 individuals per room, this year's figure being 1.28 persons per room.

The estimation of the housing situation is difficult, because in this inquiry into families, the other inmates of boarding and apartment houses have not been considered, although in most cases where information is available, they are recorded

Of the 30 houses where diphtheria occurred, 22 or 73 per cent., were bad or indifferent. compared with 70 per cent. last year.

In the 183 houses where scarlet fever occurred, 90, or 49 per cent. were bad or indifferent compared with 40 per cent last year; and in the 18 houses where cerebro-spinal meningitis occurred, 13 or 72 per cent. were bad or indifferent compared with 60 per cent. last year. Thus,of 231 houses, only 106, or less than 50 per cent. were considered to be satisfactory.

For the second year in succession, there was no unemployment among the families visited. In 1940, it was 11 per cent. and in 1941, 8 per cent., figures that were considered remarkably low compared to the previous 10 years, for which, unfortunately, we do not possess accurate data.

There has been an increase in the number of mothers of families who are working compared with 1942. In 1943 of 243 mothers, 50 were working, and 193, or 80 per cent. were engaged in home duties; while in 1942, of 137 mothers, 15 were working; i.e., 90 per cent. were on home duties.

There was also an increase of adults in the Services, and in munitions. In 1942, of 308 adults, 20 (six per cent.) were in the Services, and 19 (six per cent.) in munitions. In 1943 of 339 adults, 68 (20 per cent.) were in the Services and 28 (eight per cent.) in munitions.

The incidence of infections among recent migrants to the City was less marked than in the last two years, only 11 per cent. having lived in the City for less than 12 months, compared with 20 per cent. in 1942, 28 per cent. in 1941, and 10 per cent. in 1940.

Of 534 child contacts, 33, or six per cent. had previously had diphtheria, and 38, or nearly seven per cent. had had scarlet fever. Sixty per cent. had been immunized.

CEREBRO-SPINAL MENINGITIS

The number of cases of cerebro-spinal meningitis was lower than in 1942, but higher than in 1941. The number of deaths was high, in these days of improved treatment, but was due in the main to the fulminating type of the disease, the patient often reaching hospital in a moribund condition.

There were 26 cases notified in 1943, and in addition, three cases were notified as having died of the disease in 1942.

In the 26 cases, there were nine deaths, seven male and two female. One of the deaths was of a man in the Services; 11 of the cases and five of the deaths were in infants under the age of one year and three of the four adult deaths were in patients over 40 years of age, illustrating the usual fatality at the extremes of life.

AGE INCIDENCE OF CEREBRO-SPINAL MENINGITIS.

	1941				1942				1943			
	Cases		Deaths		Cases		Deaths		Cases		Deaths	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0-4 years	2	—	—	—	5	6	—	2	9	4	3	2
5-9 years	1	—	—	—	3	2	—	—	—	—	—	—
10-19 years	3	1	1	—	4	2	1	—	1	4	—	—
20-29 years	1	2	—	—	4	4	—	1	1	1	—	—
30-39 years	2	1	1	—	4	2	2	1	1	2	1	—
40 years and over	1	—	—	—	8	2	1	1	3	—	3	—
Totals	10	4	2	—	28	18	4	5	15	11	7	2
	14 cases		2 deaths		46 cases		9 deaths		26 cases		9 deaths	

DEATHS

Military:
E.F. aged 33, R.A.A.F. — died 25/1/'43.
x R.H. aged 39, Army — died 26/8/'42.

Civilian:
W.C. aged 9/12, infant, male — died 16/2/'43.
x E.B. aged 77, female — died 20/8/'42.
H.H. aged 11/12, infant, male — died 24/2/'43.
S.C. aged 7/12, infant, female— died 24/2/'43.
x M.D. aged 33, nurse, female — died 4/6/'42.
J.V. aged 63, packer, male — died 25/3/'43.
J.K. aged 45, male — died 26/8/'43.
K.G. aged 64, male — died 29/8/'43.
A.S. aged 3/12, infant, male — died 30/10/'43.
S.R. aged 6/12,infant, female — died 15/12/'43.

x Deaths occurred in 1942: but were not notified until 1943.

TUBERCULOSIS.

The total number of patients, 393, suffering from tuberculosis who were under supervision in 1943, again shows an increase over that of the preceding years. Last year it was thought that the upward tendency was due to the greater accuracy and wider range of opportunity for diagnosis, particularly with reference to the micro-photography X-ray service of the Army; but as deaths have also slightly increased, it looks as if there was at least no improvement in the position during the last few years. The number of deaths for the four years of the war, and the previous 15-year averages are given in Table I.

TABLE 1.

DEATHS FROM TUBERCULOSIS

1925-1929 (average annual number)	86	
1930-1934 (average annual number)	66	
1935-1939 (average annual number)	57	
1940	88	
1941	68	
1942	67	annual average number for years 1940-1943 — 74
1943	75	

It will be seen from the above table that the figures for deaths from tuberculosis were showing a decline from an average of 86 for the years 1925-29; 66 for the years 1930-34, and 57 for the years 1935-39, while the average for the last four years has risen to 74. This may be due to more people coming into the City for treatment and to the war-time increase in the industrial population, but the figures are disturbing nevertheless.

Of the 393 cases under supervision in 1943, 26 were repatriation cases (12 in 1942), 19 were "wanderers" (25 in 1942), i.e., individuals with no fixed address.

TABLE II.

AGE DISTRIBUTION

Years	Male	Female	Totals
0-4 years	1	—	1
5-9 years	1	2	3
10-14 years	1	1	—
15-19 years	10	10	20
20-24 years	13	23	36
25-34 years	44	53	97
35-44 years	53	39	92
45-54 years	53	23	76
55-64 years	32	14	46
65 years and over	15	4	19
Unknown	1	—	1
Totals	224	169	393

The usual preponderance in young women is shown in the above figures. It is most marked between the ages of 20 and 34, with 57 cases in males, and 76 in females. The figures for the 15-34 group for the last four years are as follows:—

TABLE IIa

Year	Males	Females	Totals
1943	67	86	153
1942	63	71	134
1941	52	70	122
1940	70	78	148
Totals	252	305	557

NEW CASES:

There were 151 new cases under supervision in 1943 (160 in 1942), 101 in males and 50 in females. Of these, 40 (35 males and five females) died during the year. In 1942, the deaths among the 160 new cases were only 14.

Deaths from Tuberculosis:

There were 75 deaths from tuberculosis, 61 in males and 14 in females, compared with 68 in 1942, 39 males and 28 females. Two male deaths were from tuberculous meningitis supervening on an unsuspected pulmonary infection. All other deaths were due to the pulmonary form of the disease. Of these, 16, 13 men and three women, were "wanderers." Twenty died at Sanatoria, 32 in hospital and 23 at home.

Twenty-three had been known to the Health Department for less than a year, four between one and five years; 14 between five and 10 years, eight between 10 and 15 years and four over 15 years. Twenty-two cases were notified only after death had occurred.

As an indication of the rate of progess of the fatal cases, 12 were ill for less than one year, 50 between one and five years and 13 over five years.

TABLE III.

AGE DISTRIBUTION

Years	Male	Female	Totals
0-4 years	—	—	—
5-9 years	—	—	—
10-14 years	—	—	—
15-19 years	—	1	1
20-24 years	2	2	4
25-34 years	5	6	11
35-44 years	11	2	13
45-54 years	17	3	20
55-64 years	13	1	14
65 years and over	11	—	11
Unknown	1	—	1
Totals	61	14	75

SPUTUM TESTS.

Three hundred and ninety-three sputum tests were made, of which 110 were positive, 68 in males and 42 in females.

CHILD CONTACTS.

One hundred and ninety-six children under 15 years of age, were living in contact with cases of tuberculosis, and in 60 instances, the patient had positive sputum. Twelve of these were repatriation cases.

Of the children in contact with sputum-positive cases, 15 were under five years of age, 22 between five and nine years of age, and 23 between the ages of 10 and 14.

TYPHOID FEVER

There were six cases of typhoid fever, all female, in the City; but all were connected with the Cheltenham outbreak. The first to be notified on the 25th March, was that of a girl of 10 years of age who had stayed three weeks before at a house in Cheltenham from which a case of typhoid fever was later sent to hospital.

The next two cases, on the 9th and 15th April respectively were on the staff of a hospital where cases were being treated. On the 17th April, what appeared to be an isolated case was notified, but on enquiry it was found that she had been cycling in the district and had drunk milk at a cafe from which several cases were reported later.

In May, two members of the staffs of two hospitals contracted the disease, and that was the end of the cases in the City. There were no deaths.

HYDATIDS.

The death occurred in May of a man aged 66, from hydatids. Although he had lived in the City nearly all his life, there was a history that he lived at Dandenong for two years at the age of 10, and ate much water-cress. His sister, who had been with him at the time, and was also addicted to water-cress, was operated on for hydatid of the neck over 40 years ago. The case had first been operated on for hydatids 30 years ago, and until six months before his final illness had had no trouble.

There was another death from hydatids in a man of 74, but details of the case were not available.

UNDULANT FEVER

There was one case of brucella abortus infection, in a man of 36. He was not a great drinker of milk, but worked in the "offal and condemned meat" section in a large wholesale butcher's establishment, and possibly contracted the disease through handling infected carcases.

MEASLES and WHOOPING COUGH

There was very little, if any, morbilli (true measles) and only a few cases of pertussis There was one death from pertussis in an infant aged seven months from complicating broncho-pneumonia.

RUBELLA.

Since 1937 German measles has been prevalent in Victoria—cases have included a large number of adults, and the disturbance is generally mild. The disease was formerly regarded as unimportant, but recent investigations have given it a new significance.

In December, 1941, Dr Norman Gregg, of Sydney, delivered a lecture in Melbourne later published in the Journal of the Australian Opthalmological Society, reporting 78 cases of congenital cataract of an unusual type following german measles in the mothers during the early stages of their pregnancy. Later, a survey was undertaken in Adelaide under the auspices of the Institute of Medical and Veterinary Science, of which Professor Weston Hurst is director, and the results were published in the Australian Medical Journal of 11th September, 1943. In the Adelaide survey conducted by Charles Swan, A. L. Tostevin, the late Brian Moore, Helen Mayo and G. H. Barham Black, the abnormalities recorded as following German measles in the mother during pregnancy included cataract, deaf-mutism, heart disease, microcephaly and mental retardation. The authors recommend that where rubella occurs early in pregnancy, the effect of repeated doses of convalescent serum should be investigated. The question is of great interest, as cases are still occurring, and an inquiry among mothers attending Health Centres, might be of considerable scientific interest.

ACKNOWLEDGMENTS.

I wish to express my appreciation of the work of Sister Dossetor my assistant in the infectious diseases section, of the Nursing and Clerical staff, and also of the Head Teachers and Infant Mistresses for their sympathetic co-operation in the schools.

HILDA W. BULL, B.Sc., M.B., D.P.H.

REPORTS OF DENTAL OFFICERS.

105 Collins Street,
Melbourne, C.1.
31st March, 1944

The Medical Officer of Health,

Sir,

I have the honour to submit my final report on the work of the Dental Centre at Kensington.

There follows a summary of the work accomplished during the year 1943.

No. of individual children seen	500

Ages of individual Children seen:

1 year	2 years	3 years	4 years	5 years	6 years
147	105	70	85	61	32

Total No. of visits	915

Number of Children not needing any treatment

1 year	2 years	3 years	4 years	5 years	6 years
129	73	46	31	18	9

Number of children needing treatment

1 year	2 years	3 years	4 years	5 years	6 years
18	32	24	54	43	23

Nature of Treatments:—

One-year Group: In this group the main fault was the beginning of malocclusion from persistent use of comforters. In one case a general anaesthetic was necessary and four (4) teeth had to be removed. The obvious cause in this case was the all-day use of a comforter on which was placed honey.

One case showed decalcification of the incisal edges of the upper incisor teeth. The mother's history disclosed the fact that during pregnancy the mother was very sick, had a goitre and nephritis, and did not eat either butter or milk. The assumption was that the defective teeth were due to pre-natal causes.

Two-years Group: Eighteen children in this group showed marked signs of malocclusion from comforter sucking. Splints were demonstrated and the condition pointed out to the mothers and warnings were given individually of the results to the child's appearance, etc. if strenuous efforts were not made to eliminate the habit. There were two cases of severe gingivitis which responded to treatment. Three cases had to be sent to the Dental Hospital for a general anaesthetic and a total of 14 teeth had to be removed. In two of the three cases a history of honey and comforter was disclosed. Eight fillings were done in this group.

Three-year-old Group: There were eighteen fillings in this group. Five were sent to the Dental Hospital and approximately twenty-four infected teeth were removed. In addition two extractions were done under local anaesthetic at the Centre.

Four-year-old Group: There were 42 fillings in this group. General anaesthetics, 17; teeth extracted, 105; local extractions, 4.

Five-year-old Group. There were 16 fillings in this group. General anaesthetics, 9; teeth extracted, 39; local extractions, 2.

Six-year-old Group: There were 13 fillings in this group. General anaesthetics, 5; teeth extracted, 14; local extractions, 9.

Summary:

Fillings and Treatments	General Anaesthetics	Extractions	Local Extractions
97	39	193	15

Comment:

The number of visits during the year was, I believe, a record. This was mainly due to the enthusiasm of the Sisters at the Centre and also to the great advantage of having Sister Polkinghorne for most of the period under review. It is impossible to work on young children without a first-class assistant, and Sister Polkinghorne proved herself invaluable.

I have been asked to express a view as to whether the experiment was a success, and I would unhesitatingly say, yes. With any system where "advice and direction" is the rule, and the treatment is left to the mother to have carried out, many children will go untreated. An acute abscess resolves into a chronic stage, for instance, pain and swelling subside; in the parent's opinion the "gumboil has burst" and, therefore, they imagine that the condition has cleared up and nothing is done. The child is left with the "poison factory" and absorbs toxin and pus, and the oncoming teeth are sometimes affected.

We cannot compel parents to have their children treated. The fact remains, however, that a large number of children have, as a result of our advice and preaching, had treatment, and they, as well as their parents, have become tooth conscious.

It has been a real pleasure to inspect these children regularly and to note the pride with which they are anxious to display beautiful teeth, perfectly clean.

Poor diet seems to be the main factor—too much refined carbo-hydrates.

A large number of children have got into the habit of using an anti-acid mouth wash, say salt and soda, and in the majority of cases their mouths are very clean.

Comforters used in excess are very definitely damaging to the tooth. The number of cases of malocclusion is alarming. When foodstuff such as honey, etc. is placed on the comforter, it is almost certain that the child's teeth will decay.

Diet:

Surely it is time we followed the example of the United States of America in checking foodstuffs and particularly in checking untrue and misleading advertisements.

There, apparently, there is a Bureau which checks up the extravagant claims of the advertisement writer. If the advertised claim is not true, the name of the goods, the claim made for them, and a scientific report denying the claim, are published, and a demand made that the advertisement will not be published in future.

A scientific Bureau in this country would be most useful in letting us know which is the more nutritious and therefore the better to eat, the highly-decorated package, or the quickly preferred contents.

In conclusion, I very much regret that owing to pressure of private practice. I have had to sever my connections with the Health office of the Melbourne City Council.

From Dr. Dale and his staff, I have had nothing but the greatest help and sympathy, and at all times the utmost courtesy.

I would, therefore, like to take this opportunity of offering them my humble and sincere thanks.

J. W. BYRNE, B.DSc., L.D.S.

Dental Hospital,
Spring Street, Melbourne, C1.
18th February, 1944.

The Medical Officer of Health,

Sir,

I beg to present the fourth Annual Report of the Dental Section of the Newry Street Health Centre. It has been a short year for the Centre, as my attendances ceased last September, and there has been no one to carry on the work.

The following is a summary of the number of children attending and the nature of operations performed.

No. of individual children seen 204   No. of individual attendances 452

Ages of individual children seen:

1 year	5	4 years	75
2 years	39	5 years	18
3 years	54	6 years	13

Nature of treatments given:

(a)	Prophylactic treatment	17
(b)	Teeth filled—deciduous, 185; permanent, 1	186
(c)	Other operations including temporary fillings, dressings and care of infective mouths	38
(d)	Teeth extracted with local anaesthetic	5
(e)	General anaesthetics treated at Melbourne Dental Hospital	9

In addition, during the last term especially, there have been a number of filling cases cared for by the pre-school clinic at the Dental Hospital, and many of the mothers have been persuaded to take their children there for regular inspection.

It is not possible to compare in detail the results of this year's work with those of last year. but I am satisfied that the dental hygiene of the kindergarten children is as good as in 1942.

Sister Elson and Sister Johnson have been extremely helpful with the work coming from the kindergarten, for which I am very grateful, as I have had no dental attendant and my thanks are due to Sister Smith for her co-operation with the work from the Centre.

BEATRICE WOODCOCK, B.DSc., L.D.S.

REPORT OF CHIEF HEALTH INSPECTOR.

Health Department,
Town Hall Chambers, Melbourne.
7th March, 1944.

The Medical Officer of Health,

Sir,

I have the honour to submit a report for the year 1943 upon the varied activities of the Department, which are governed by the provisions of the following Acts and Regulations.

ACTS AND REGULATIONS.

Acts:

Health Acts, Slum Reclamation and Housing Acts, Local Government Act, Factories Acts. Police Offences Act, Melbourne and Geelong Corporation Act, Goods Act, Births Notification Acts, Sale of Horseflesh Act.

Regulations under Health Act:

Registration, Rat Destruction, Hairdressers' Shops, Offensive Trades, Seizure (Claims), Eating House, Camping, General Sanitary, Analysis, Septic Tanks, Cattle Sale Yards, Infectious Diseases, Cleanliness (Food), Food and Drug Standards, Nightsoil, Smoke Abatement, Tobacco Packages, Stream Pollution, Fire Prevention, Building (Tent), Boarding and Lodging Houses.

Other Regulations:

Housing (Standard of Habitation) Regulations, Regulations under the Goods Act.

By-laws and Regulations:

By-laws and Regulations of the Council relating to Places of Amusement, Public Buildings, Dancing Saloons, Fowl Yards, etc., are also administered by the Department.

HOUSING.

The shortage of labour and scarcity of materials caused by war conditions, which have existed for the past two years, have continued, and consequently, little, if any, progress has been made with the slum reclamation problem. Notwithstanding all the difficulties encountered, however, every effort has been made to maintain existing houses in a reasonably habitable condition, the details of the work being shown later in the report.

Houses dealt with under the Slum Reclamation and Housing Acts:

As agents for, and under the direction of,the Housing Commission, 327 inspections and re-inspections for work in progress have been carried out. The revised policy of the Commission, instituted in 1942, has continued to determine our actions, and attention has been confined principally to houses which are obviously dilapidated or in need of urgent and extensive repairs. Owing however, to the ever-increasing acuteness in the shortage of houses and the necessity of conserving every usable dwelling wherever possible, it has proved practically impossible to maintain any standards, and, consequently, the number of official reports recorded has been very limited. The number of statutory reports submitted to the Commission was eighteen (18) and these were classified in accordance with the requirements of the Act, ten (10) being included in list "A" requiring demolition of the premises and eight (8) in list "B" requiring compliance with the Standard of Habitation Regulations.

The following table shows the action recommended regarding the houses "reported" and the number in each area:—

TABLE I.

HOUSES REPORTED.

	City	E. Melb.	S. Yarra	Carlton	N. Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total
Demolition	1	—	—	1	—	—	2	5	1	10
Repairs	—	1	—	1	2	—	2	2	—	8

Notices Issued:

In compliance with the instructions of the Housing Commission Statutory notices affecting twenty-eight (28) properties were issued together with copies of the Commission's declarations respecting such premises. This involved the preparation and service of thirty-three (33) notices, twenty-eight (28) on owners, one (1) on a mortgagee and four (4) on occupiers. With the exception of the four (4) notices above mentioned, which were of a special nature, no notices were served on the occupiers of these premises, thus conforming with the policy of the Commission not to disturb existing tenancies. In those cases in which demolition notices were served, but the demolition of the premises was deferred for the duration of the war, provided the owner undertook to effect urgent repairs, the greatest difficulty is experienced in getting the urgent repairs carried out. Similarly, in the cases in which compliance with the Regulations is demanded, but the work is divided into two(2) groups, "A" representing urgent repairs and "B" other requirements which are deferred on the owner agreeing to carry out the urgent work represented in Group "A", we are unable to report very much progress as the same difficulties are encountered. The nature of the notices issued, together with the areas affected, are set out hereunder:—

TABLE II

NOTICES SERVED

	City	E. Melb.	S. Yarra	Carlton	N. Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total
Demolition	1	—	1	4	4	—	4	7	1	22
Repairs	—	1	—	1	2	—	2	—	—	6

Compliance with Notices:

As a result of notices issued during the year and of others outstanding compliance has been effected in thirty-five (35) instances. Six (6) premises have been demolished; complete specification of repairs have been carried out at three (3) premises; and urgent repairs have been carried out at nine (9) premises where demolition orders have been issued and at seventeen (17) premises in accordance with the concession relating to houses where compliance with the Regulations had been demanded. Twenty-five (25) premises are at present vacant and awaiting demolition. Work at other premises where notices have been issued has either not yet been commenced or is in various stages of progress.

TABLE III.

COMPLIANCE WITH NOTICES

	City	E. Melb.	S. Yarra	Carlton	N. Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total
Demolition	—	—	—	3	2	—	—	1	—	6
Repairs	—	—	—	—	1	—	1	1	—	3
Urgent Repairs	—	—	—	5	12	6	1	1	1	26

The following tables set out the number of houses reported, the number of notices served and the number of compliances in the several areas since the coming into operation of the legislation in 1940, since when a total of 617 houses have been inspected in detail and reported to the Housing Commission.

TABLE "A"

HOUSES REPORTED SINCE MAY, 1940

	City	E. Melb.	S. Yarra	Carlton	N. Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total
Demolition	22	—	1	157	30	15	186	22	4	437
Repairs	—	2	2	38	26	33	66	10	3	180

TABLE "B"

NOTICES SERVED SINCE MAY, 1940

	City	E. Melb.	S. Yarra	Carlton	N Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total
Demolition	22	—	1	124	27	10	130	9	3	326
Repairs	—	2	2	31	27	30	38	6	4	140

TABLE "C"

COMPLIANCE WITH NOTICES SINCE MAY, 1940

	City	E. Melb.	S. Yarra	Carlton	N. Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total
Demolition	6	—	—	94	9	15	71	1	—	196
Repairs	—	1	—	15	11	7	13	1	1	49
Urgent Repairs	—	—	1	14	15	12	6	1	3	52

The system of offering deferments and granting extension of time for both demolition and repairs, whilst offering a solution of the difficulties in some instances, tends to create more difficulties in others. It is found that quite a number of property owners are exploiting the concession granted and making little or no effort to have even the most urgent repairs attended to. The existing position regarding housing is completely unsatisfactory. The present method, dealing with the problem in a piecemeal manner and involving much labour both in administration and execution, produces results in no wise commensurate with the effort and can provide no reasonable solution of the problem. There is urgent need for the preparation of a scheme or schemes for the re-planning of the more congested areas in preparation for post-war reconstruction

The re-housing of families from slum areas by the Housing Commission during the year has been almost negligible, four (4) such families being placed in Commission houses, only one of which, consisting of two (2) adults and four (4) children was from a house in the Carlton area, reported by the Department and declared by the Commission as unfit for human habitation. The other three (3) consisting of six (6) adults and eight (8) children were from selected applicants irrespective of any order on the premises from which they were removed. This now makes a total of 171 families consisting of 209 adults and 184 children which have been re-housed from City areas since the commencement of the housing scheme in 1940.

Health Act

In furtherance of the Department's policy of maintaining dwellings in a habitable condition 433 investigations of various phases of housing, such as defective roofs, dampness in walls, sanitary fittings, drainage, etc., have been dealt with under the Health Act and 362 notices have been served on the owners of the properties to effect urgent repairs in compliance of which repairs were effected in 366 instances, and work was in progress at the other 26 premises at the close of the year. Following the customary practice of keeping records of all demolitions of dwelling undertaken voluntarily by the owners for factory or business extension, four (4) such instances were reported during the year. Demolitions under the Housing Acts, together with the number above recorded makes a total of ten (10) premises demolished in the City area during the year and since May, 1940, a grand total of 315.

Boarding Houses:

The number of boarding and lodging houses registered under the Health Act continues to increase and exceeds last year's figures, which were a record for the Department, by twenty-four (24). This increase can be accounted for by the continued influx of population into the City area, which tends to bring a larger number of houses within the category of boarding houses prescribed by the Health Act. All these premises are regularly inspected to see that the Regulations are complied with and that no serious overcrowding takes place.

There appears to be quite a trafficking in this class of business which is indicated by the large number of transfers (143) of registrations which have been effected as shown in the schedule of registrations. This trafficking calls for stricter surveillance of these premises than would otherwise be necessary in order to ensure both compliance with the Health Act with regard to transfers, and the instruction of new proprietors in all other aspects of the Boarding and Lodging House Regulations.

During the year, sixteen (16) notices to effect repairs and renovations were served both on the owners of the properties and on the registered proprietors in compliance with which improvements were effected at nine (9) premises.

FOOD AND FOOD PREMISES

In the supervision of food premises the Regulations administered are the Cleanliness (Food), Eating House, Boarding House, Seizure, General Sanitary and Rat Regulations.

The man-power problem and the consequent shortage of staff and the employment of inexperienced personnel has tended to make the work of the supervision of premises where food is manufactured, prepared, stored or exposed for sale much more onerous and exacting, and greater surveillance has had to be exercised particularly in the inner City districts. Regular supervision has been carried out, and in addition to food factories, hotels, boarding houses, grocers, greengrocers, butchers, delicatessen, small-goods and confectionery shops inspection was made of 485 eating houses and 259 premises where ice-cream, cordials etc. are manufactured, all of which have to be registered with the Council annually.

Special attention has again been given to all milk bars in the City area with regard both to the general cleanliness of premises, utensils and all other equipment used in the preparation of drinks, and particularly to the condition of the glass-ware and crockery used in connection therewith. Sixty-six (66) samples of "drinking" milk were taken at these premises for the purpose of chemical analysis, details of which are reported under the heading of "Food Sampling."

The Cleanliness (Food) Regulations relating to disposal of waste beer have now been in operation for over twelve months. It has been found that the licensees of hotels generally are carrying out the provisions of the regulations satisfactorily and no gross abuses have been detected.

Repairs and renovations were carried out during the year at 49 premises. Details of this work are shown in the attached summary.

FOOD SAMPLING

In addition to the work of inspection of food premises, there is also carried out the regular and systematic collection of food samples for chemical and bacteriological examination.

Four hundred (400) samples of foodstuffs were procured for chemical analysis during the year, representing an increase of 49 when compared with the number procured in 1942. The samples consisted of cheese 15 (3); jam 7 (6); ice cream 3 (3); milk 305 (274); sausage meat 32 (16); sauces 7 (6); pepper 5 (-); vinegar 8 (5); coffee 7 (4); coffee and chicory 1 (-); dried fruits:—currants 5 (4); sultanas 5 (6). The figures in brackets indicate the number of samples submitted in the previous year.

Twenty-five (25) samples, or aproximately 6.25 per cent., failed to comply with the standard. This number comprised twenty (20) of milk, four (4) of sausage meat and one (1) of sauce. In addition to the four (4) samples of sausage meat not complying with the standard, ten (10) other samples failed to comply with the requirements of the Food Standards Regulations, not being labelled stating that they contained preservative. The sample of sauce was found to contain a small amount of artificial (coal-tar) colouring and the vendor was warned by letter. Proceedings instituted against vendors of sausage meat not complying with the standards and for failing to label the packages intimating that they contained preservative, resulted in fines and costs amounting to £48/6/- being inflicted.

The total number of milk samples procured during the year was 305 involving 82 vendors, consisting of 25 dairymen, 2 producers and 55 milk bars. Compared with 1942, there is an increase of 31 in the number of samples taken and a decrease of three (3) in the number of vendors. The former is in accordance with the decision of Health Committee to increase the number of samples and the latter results from the zoning system introduced by the Milk Board which has reduced the number of delivery carts now supplying the City areas.

Having regard to the popularity of milk bars, special attention was given to the quality of milk being sold from these premises, and 66 samples were taken during the year. During the periods of short supplies throughout the year, many of the "bars" were without milk, whilst others used powdered milk as a substitute. Of the total of nine (9) samples shown as below standard, from this source, four (4) were taken during those periods and obviously resulted from the faulty mixing of the milk powder.

The number of samples from all sources which complied with the standard was 285, or 93.4 per cent. of the total. Twenty (20) samples, or 6.6 per cent., did not comply with the standard. Of the samples below standard, four (4) were below the standard in their amounts of fatty solids; seven (7) were below the standard in their amounts of total solids and fatty solids; two (2) were below in their amounts of solids not fat and the freezing points were high; three (3) were below in their amounts of solids not fat and contained added water; one (1) was below in its total solids and fatty solids, and the freezing point was high; two (2) were below in their amounts of total solids; fatty solids and solids not fat, and contained added water; one (1) sample failed to comply in that the freezing point was high. Thirty-five (35) samples in all were submitted to the freezing point test to determine the presence of added water, twenty-six (26) of which passed the test satisfactorily.

Samples taken from milk carts in course of delivery numbered 237 as compared with 217 for the previous year. This number consisted of 143 from bulk supplies and 94 from bottled milk. Sixty-six (66) samples of "Drinking Milk" were obtained from City milk bars, being an increase of 33 over the previous year, whilst two (2) producers' samples were taken at the point of delivery, both of which failed to comply with the standard.

With regard to the twenty (20) samples which were found to be below standard, nine (9) were from City milk bars, nine (9) from delivery carts, consisting of five (5) samples from bulk supplies and four (4) samples from bottled milk, and two (2) from producers' samples. Letters were forwarded to the vendors in three (3) instances in which the samples were only slightly below standard. Proceedings,however, were taken against the vendors of all other samples found to be below standard and against one of the producers for failing to have his cans properly sealed. These resulted in the infliction of fines and costs amounting to £138/17/6. One case was dismissed on the plea of reasonable precautions under Section 259 of the Health Act 1928.

An analysis of the figures, shows the average quality of milk per sample as follows:—

	Total Solids	Non-Fats	Fats
All Sources	13.12	8.92	4.20
Bulk Supplies	13.07	8.91	4.16
Bottled Samples	13.07	8.94	4.13
Milk Bars	13.29	8.92	4.37

The following comparative tables show the average quality of milk per sample since 1928: also the percentage of samples which did not comply with the standard.

Year	No. of Samples	Total Solids	Non-Fats	Fats	Percentage of samples below standard
1928	300	12.96	8.95	4.01	1.0%
1929	633	12.88	8.89	3.99	3.8%
1930	276	12.90	8.90	4.00	3.6%
1931	289	12.97	9.00	3.97	2.7%
1932	286	12.88	8.89	3.99	2.5%
1933	282	12.95	8.96	3.99	2.4%
1934	281	13.01	8.95	4.06	2.4%
1935	271	13.01	8.90	4.11	5.0%
1936	280	12.92	8.88	4.04	3.5%
1937	265	13.11	8.90	4.21	2.6%
1938	269	13.11	8.97	4.14	5.2%
1939	275	13.38	9.18	4.20	1.09%
1940	279	13.24	8.98	4.26	3.2%
1941	281	13.27	9.03	4.24	2.8%
1942	274	13.18	9.00	4.18	5.8%
1943	305	13.12	8.92	4.20	6.6%

BACTERIOLOGICAL EXAMINATION OF MILK SAMPLES

In addition to the samples of milk submitted for chemical analysis, there was also a total of 261 samples of milk submitted to the Veterinary Research Institute, Parkville, for bacteriological examination, consisting of 219 from "bottled milk" and 42 from bulk supplies, which shows a slight increase when compared with that of the previous year (255).

As in former years, samples were procured from the companies supplying milk under the Council's subsidised scheme and from carts in the course of delivery in the City proper. Regular weekly samples were obtained from a metropolitan hospital.

The result of the examinations discloses that 62 samples, or 23.7 per cent. of the total, showed unsatisfactory results, the counts being higher than the standard tentatively accepted as reasonable. Seven of these samples were found to be infected with streptococcic mastitis, and nine showed evidence of excessive bacterial contamination.

The whole of the samples, with the exception of four, submitted to the Laboratory, were from pasteurised milk, all of which were submitted to the Phosphatase Test with the following results:—

Source	No. of Samples	Satisfactory	Percentage	Unsatisfactory	Percentage
All Sources	257	198	77.0%	59	23.0%
Subsidised Milk	87	70	80.5%	17	19.5%
Metropolitan Hospital	42	41	97.6%	1	2.4%
Carts in course of delivery and other sources	128	87	68.0%	41	32.0%

The above results show that the improvement reported last year has not been fully maintained, and is probably accounted for by the continued lack of skilled assistance together with the difficulties experienced in obtaining replacement parts for plant and machinery.

The attached Table "A" gives a comparative summary of the average counts of the different milks, and it will be noted that the averages of the microscopic and agar plate counts maintain the high figure commented upon in last year's report.

Table "B" gives a comparative summary of the averages for the periods 1939-1943.

BACTERIOLOGICAL EXAMINATIONS OF MILK SAMPLES — 1943

TABLE "A"

COMPARATIVE SUMMARY OF AVERAGE COUNTS OF DIFFERENT MILKS.

The Counts give the number of Germs per cubic centimetre of milk.

Vendor	No. of Samples	Microscopic Count Average (Logarithmic)	Microscopic Count % of samples under 1 million	Agar Plate Count Average (Logarithmic)	Agar Plate Count % of samples under 50,000	E. coli in 0.01 ml. Percentages	Remarks
All Sources	261	140,000	88.0%	44,000	61.0%	—60% +40%	62 letters 7 ev. s. mastitis 9 ev. excess. bacterial contamn.
Vendor "A" Pasteurised	43	57,000	98.0%	32,000	67.0%	—81% +19%	8 letters 1 ev. s. mastitis
Vendor "B" Pasteurised	44	110,000	91.0%	37,000	73.0%	—41% +59%	11 letters 2 ev. excess bac. contamn.
Vendor "C" Pasteurised Metropolitan Hospital	42	110,000	95.0%	25,000	71.0%	—88% +12%	9 letters 4 ev. s. mastitis
Milk carts in course of delivery and other sources	132	230,000	82.0%	60,000	51.0%	—50% +50%	34 letters 2 ev. s. mastitis 7 excess. bac. contamn.

COMPARATIVE SUMMARY OF BACTERIOLOGICAL EXAMINATION OF MILK SAMPLES FOR THE YEARS 1939, 1940, 1941, 1942 AND 1943.

TABLE "B"

	1 Microscopic Count Percentage of samples showing under 1,000,000 per c.c.					2 Living Germs Percentage of samples showing under 50,000 per c.c.					3 Percentage of samples showing absence of E. coli in 0.01 ml.				
	1939	1940	1941	1942	1943	1939	1940	1941	1942	1943	1939	1940	1941	1942	1943
A. Milk bottled in City, pasteurised at country depot	81%	97%	92%	95%	98%	88%	88%	56%	82%	67%	73%	90%	90%	74%	81%
B. Milk bottled in City, pasteurised at country depot	—	100%	92%	83%	91%	—	97%	60%	62%	73%	—	76%	71%	64%	41%
C. Milk delivered in bulk, pasteurised on farm.	92%	95%	81%	70%	95%	97%	86%	70%	52%	71%	100%	91%	93%	88%	88%
D. Various Milk Carts	65%	76%	69%	71%	82%	60%	49%	37%	57%	51%	55%	54%	44%	31%	50%

Under present conditions a sample of milk may reasonably be expected to contain less than one million germs per cubic centimetre as shown by direct miscroscopic count (Column 1), less than 50,000 germs per cubic centimetre capable of growing at blood heat (Column 2.), and absence of bacillus coli which is derived from filth, in one-hundredth part of a milli-litre (Column 3.).

The Table shows what proportion of the samples attained this standard.

SWIMMING BATHS

Regular sampling for bacteriological examination of the water in the various pools throughout the City was carried out during the warm weather. The samples were all taken during the afternoons when the pools were in active use by a good attendance of bathers. The results of these examinations, together with those for free chlorine in the water, give the assurance that the purification plants were operating satisfactorily.

RAT DESTRUCTION

Constant attention has been given to this important work throughout the City proper; food premises, shops and warehouses having been regularly visited, but owing to the limited staff, visits to the outer areas have only been made when specially required. In addition to its work with dogs, the staff has over 500 traps in constant use. The laying of poison baits is resorted to where other methods are impracticable, and approximately 62,000 baits were laid, the results of which must considerably increase the number of rodents destroyed over and above that shown in the following table.

As a result of the publicity given to the rat menace by the issue of leaflets, increased demand was made on the Department for advice and for the services of the rat staff, which is reflected in the increased number of complaints investigated. Over 4000 poison baits were supplied to ratepayers at a nominal cost.

No abnormal conditions were noticed that would indicate any sickness in the rat population, and, consequently, no specimens were submitted for bacteriological examination, although several live rats were forwarded for experimental purposes.

The extent of these operations will be evident from the following table which indicates an increase of 311 in the number of complaints, and the highest number of rodents destroyed since 1938:—

Complaints attended to	Notices under Rat Regulations	Premises Visited	No. of premises where structural work carried out	Total No. of rodents destroyed
759	49	2329	142	Rats 7769
				Mice 168
				7937

The species of rats caught and destroyed during the year is shown in the following table, which gives a comparison with previous years andshows the differentiation between, the sub-species of the black rats (prior to 1937 the totals for black and brown rats only were recorded):—

Year	Black Rats	Brown Rats	Total
1935	3073	3428	6501
1936	4275	4490	8765

	M. Rattus	M. Alex.	M. Norveg.	Total
1937	892	2409	4816	8117
1938	957	2379	4708	8044
1939	1090	2065	4252	7407
1940	923	1620	3933	6576
1941	924	1510	4172	6606
1942	1034	1648	3298	5980
1943	951	2075	4743	7769

OFFENSIVE TRADES

During the year three (3) applications under Section 82 of the Health Act 1928 were considered and consent of Council was granted for the establishment of a rag-picking and rag-sorting business in Footscray Road, West Melbourne, and extensions, alterations and additions to a wool-scouring and fellmongering establishment and a boilingdown works in the Kensington area. One (1) butcher's premises was registered for fat rendering from materials derived from their own premises.

In the administration of the Offensive Trades Regulations and the relevant sections of the Health Act governing these premises, six hundred and sixty (660) visits of inspection have been made and whilst the condition of the premises generally was found to be satisfactory, the conditions found at the businesses associated with the disposal of dead stock and animal offal, as reported last year, continues to give cause for some concern, the main cause of which is manpower difficulty, and until this is overcome, little hope can be held out for any improvement in the situation..

The number of offensive trade premises registered for the year was one hundred and ten (110), which are shown under the following classifications, and which include two new registrations whilst six premises were not re-registered, making a decrease of four compared with last year, and which is accounted for by two butchers ceasing to render fat at their premises and the abolition of a manure work and a store for dried furred skins:—

Bone Boiling and Milling, 1; Fat-extracting or melting, 22; Fellmongery, Woolscouring and Woolwashing, 14; Flock Shoddy or Mungo Manufacture, 2; Glue or Size Factories, 1; Gut cleaning or scraping, 2; Manure works, 2; Marine stores, 9; Poultry killing, cleaning and dressing, 10; Rag Picking or Sorting, 2; Soap Works, 2; Store for Skins, Hides, Hoofs, Hair or Bones, 46; Boiling Down Works 1; Oil Boiling, 1; Abattoirs, 1; Refuse Destructor, 1; Tip, 1.

REGISTRATIONS

Total registrations effected under the Health Act for the year are as follows:—

Premises	No. Registered	No. not Renewed	No. Altns. Repairs or Renovns.	No. New Registrations	No. of Transfers
Boarding Houses	679	15	19	35	143
Eating Houses	485	27	38	23	100
Ice Cream and Aerated Waters, etc.	259	30	7	18	24
Common Lodging Houses	6	1	—	—	—
Cattle Sale Yards	1	—	—	—	—
Premises where Eggs are Chilled	4	—	—	—	—
Offensive Trades	110	6	4	2	2
Totals	1544	79	68	78	269

Under the Council's By-Laws and Regulations, 31 Dancing Saloons and 6 places of Pastime were also registered.

HAIRDRESSING SALOONS

Hairdressing establishments, both male and female, have been regularly inspected throughout the year, and the premises generally have been found to be in good condition and in compliance with the Haidressers' Shops Regulations made under the Health Act. The restriction on the use of formalin continues, but with careful selection of substitutes the sterilization of instruments in these premises is kept up to a reasonably satisfactory standard. This work is carried out in conjunction with the staff of the Hairdressers' Registration Board of Victoria, with whom cordial relationships are maintained. Five (5) businesses were abolished during the year and repairs and renovations carried out at another five (5) premises.

STABLES

Regular inspection is made of all stables, particularly during the summer months, to ensure their general cleanliness and the weekly removal of all manure. During the year, improvements were effected at nine (9) premises.

SMOKE NUISANCE

Careful attention was given to the administration of the Smoke Regulations and the more troublesome furnaces were subject to constant supervision. Only twenty-five (25) complaints of nuisance were received during the year. Alterations were effected to four (4) furnaces whilst minor improvements were made to the chimneys of a number of cafes and boarding houses.

SANITARY SERVICES

Two hundred and sixty (260) temporary conveniences were installed at buildings in course of erection or alteration, and at military camps situated throughout the various areas of the City, involving approximately 13,108 clearances. This shows a decrease when compared with last year, when there were 314 installations and approximately 16,000 clearances, the number of services to the military authorities having been reduced. In addition to these installations, the marshalling grounds for troops takng part in marches through the City were serviced, which involved 467 clearances.

The night-soil is disposed of at the depot of the Melbourne and Metropolitan Board of Works at Campbellfield.

INVESTIGATION OF COMPLAINTS

One thousand, five hundred and thirty-six (1536) complaints were received and investigated during the year, which is an increase of over 300 when compared with the previous year.

The increase can be attributed mainly to the publicity given to the rat menace. An analysis of these complaints shows that 759 dealt with the rat problem, 432 related to various phases of defective housing, 115 to foodstuffs and food premises, 81 to unsatisfactory garbage bins and refuse, 25 to smoke nuisance, 30 to yards and drainage of premises and 24 to vermin in dwellings, whilst the remainder (151) are grouped as miscellaneous.

PUBLIC BUILDINGS

The customary supervision of all registered dancing saloons and places of pastime under the Council's By-Laws and Regulations has been maintained, and in co-operation with officers of the Public Health Department, all theatres and other public buildings have been regularly inspected both day and night. The popularity of all these places has continued throughout the year and has necessitated a very close oversight to prevent over-crowding and to ensure the proper conduct of the premises concerned.

SUMMARY OF ROUTINE WORK CARRIED OUT DURING 1943

No. of complaints received and attended to		1536
Re-inspections for compliance with notices		1926
Fire reports received and attended to		264
Inspections and re-inspections under Slum Reclamation and Housing Acts		327
Reports forwarded to Housing Commission		18
Notices served under Slum Reclamation and Housing Acts		28
Specifications forwarded to owners under Slum Reclamation and Housing Acts		6
Inspections and re-inspections made under Health Act		247
No. of specifications forwarded to owners and proprietors under Health Act		115
Inspections of Hotels and Boarding Houses		2274
Inspections of Common Lodging Houses		23
Inspections of Eating Houses		5463
Inspections of Ice Cream and Aerated Water Premises		1506
Inspections of Factories (where food is manufactured)		1262
Inspections of other food premises		6321
Seizures of Foodstuffs (consisting of Bread, Mutton, Milk)		3
Inspections of Public Buildings (day and evening)		696
Inspections of Hairdressing Saloons		399
Inspections of Offensive Trades and Cattle Sale Yards		660
Inspections of vacant land		50
Inspections of yards and refuse		13037
Inspections of Stables and Manure Bins		844
Interviews with property owners, architects, contractors, etc.		4608
Inspections by female staff of premises where females employed		106
Investigations of infectious diseases and instructions to householders (scarlet fever, 219, diphtheria 50, other infectious diseases 41)		310
Investigation of tuberculosis and domiciliary visits		1569
Visits to Health Centres (36) Midwives (127)		163
Returns of infectious disease furnished to Public Health Department		407
Notification of infectious disease forwarded to Headmasters		150
Returns of registrations and transfers forwarded to Public Health Department		333
No. of notices received under Birth Notifications Acts		1804
Plans of new buildings and alterations examined		65
Notices served to secure the abatement of Nuisances—		
(a) Defective Sanitary Conveniences	173	
(b) Defective Drainage	42	
(c) Dirty premises and yards	20	
(d) Accumulation of refuse and rubbish	29	
(e) Dirty and defective stables	9	
(f) Other nuisances	69	
		342
Matters referred to other departments—City Engineer 23; Building Surveyor 29 By-Laws 3; Dog Inspector 10		65
Premises within the City registered by Factories Dept.—Factories 2511; Shops 3345		5856

NEW LEGISLATION

The following new legislation was brought into operation throughtout the year:—

Ministry of Health Act 1943.
Milk Pasteurization Act 1943.
Amending Infectious Diseases Regulations.
Amending Building Regulations.
Stream Pollution Regulations 1943.
Meat Transport Vehicles Regulations 1943.
Meat Supervision Regulations.
Camping Regulations.

PROSECUTIONS

Sixty-two (62) offenders were proceeded against for contraventions of the Health Acts, Regulations and Council's By-Laws. In twenty-three (23) instances (affecting partners and employes) the cases were withdrawn. In two (2) instances the cases were dismissed; one (1) for adulterated milk and one (1) for keeping an animal on food premises. With regard to the milk prosecution the dismissal was made on the plea of reasonable precautions offered by the dairyman concerned. In thirty-seven (37) instances, defendants were convicted and fined as follows:—

Nature of Offence	No. of Cases	Fines	Costs
Selling adulterated Milk	17	£101 0 0	£52 8 0
Selling adulterated Sausages	4	19 0 0	8 19 6
Failing to label package of food containing preservative	7	7 0 0	13 6 6
Failing to keep premises clean	2	8 0 0	1 1 0
Leaving waste food on premises contrary to Rat Destruction Regulations	2	8 0 0	1 1 0
Smoking where food was being prepared	1	2 0 0	—
Failing to provide proper garbage receptacles	1	5 0 0	—
Failing to properly seal milk cans	1	3 0 0	2 9 0
Permitting animals on food premises	1	3 0 0	1 1 0
Selling unwholesome foodstuffs (milk)	1	10 0 0	2 12 0
Totals	37	£166 0 0	£82 18 0

GENERAL.

Notwithstanding the many difficulties associated with the abnormal conditions which have continued throughout the year, a considerable amount of useful work has been accomplished, and I wish to record my sincere appreciation of the loyal co-operation and assistance rendered both by the inspectorial and clerical staffs during the year and the cheerful manner in which they have carried out their duties under the strain imposed upon them by war conditions.

THOS. G. O. JORDAN, M.R.S.I.
Chief Health Inspector

REPORT OF CITY ANALYSTS

Melbourne Analytical Laboratory,
27 William Street, Melbourne,
12th January, 1944.

The Chairman, Health Committee.
City of Melbourne.

Sir,

We have the honour to report that during the year ended 31st December, 1943, we have received four hundred (400) samples of Foods and Drugs. The following is a brief summary of the results obtained from the Analytical Examinations:—

Black Pepper—5 samples	Complied with the standard.
Vinegar—8 samples	Complied with the standard.
Cheese—15 samples	Complied with the standard.
Jam—7 samples	Complied with the standard.
Coffee—7 samples	Complied with the standard.
Coffee and Chicory—1 sample	Complied with the standard.
Ice Cream—3 samples	Complied with the standard.
Milk—305 samples	285 complied with the standard. Four samples below the standard in their amounts of Fatty Solids; 7 below the standard in their amounts of Total Solids and Fatty Solids; 2 below in their amounts of Solids not Fat, and the Freezing Point high; 3 below in their amounts of Solids not Fat and contained added water; 1 below in its Total Solids and Fatty Solids and the Freezing point high; 2 below in their amounts of Total Solids, Fatty Solids and Solids not Fat, and contained added water; 1 sample failed to comply in that the Freezing Point was high.
Dried Fruit—10 samples	No adulteration detected.
Sauce—7 samples	Six, no adulteration detected; 1 contained artificial (coal-tar) colouring. No other adulteration detected.
Sausage Meat—32 samples	Seven contained no sulphur dioxide; others contained respectively 0.4, 0.4, 0.6, 0.6, 0.9, 1.2 1:2, 1.2, 1.3, 1.4, 1.7, 1.8, 2.0, 2.0, 2.3, 2.4, 2.5, 2.7, 2.9, 3.0, 3.3, 4.9, 5.4, 6.0, 12.3. grains per pound. No boric acid, saltpetre, nitrite or excess starch detected.

Yours obediently,

(Signed) DUNN, SON AND STONE,

(Analysts to the City of Melbourne)

REPORT OF BACTERIOLOGICAL EXAMINATIONS

The University of Melbourne,
Bacteriology Department,
Melbourne, N.3.,
10th February, 1944.

Annual Report on the Bacteriological Examinations undertaken on behalf of the Melbourne City Council by the Bacteriological Laboratory, Melbourne University, for the year 1943.

Diphtheria—A total of 298 swabs was cultured and examined and nine were found to be "positive." Two virulence tests were carried out and both proved to be "virulent" B. diphtheriae.

Scarlet Fever—170 blood plates were examined for the presence of Haemolytic streptococci and 44 were positive, i.e., giving B haemolysis and the test for Lancefield's Group A organisms.

Water—22 specimens of water from swimming baths were examined and reports for total count of bacteria and B. Coli content. A high standard of bacteriological purity for the water in swimming pools was indicated by the samples.

(Signed) HAROLD A. WOODRUFF, Director